SEARCH REQUEST FORM

Scientific and Technical Inf rmation Center

Requester's Full Name: 🖳	Ilv D. Chism	Examiner #:_	79.291 Da	ite: 23 A.	est zooz
Art Unit: 11,53 Ph Mail:Box and Bldg/Room Lo	one Number 30 6 - 5	815 Serial Nu	imber: <u>09/7</u>	7633	 -MA1I
Manabax and Bidg/Room Lo	CM19801/9	D/ 2	refred (effete). 27	MI-LIC BIOK D	-WAIL
If more than one search is	submitted, please pr	ioritize séarches in	order of need.	*****	****
Please provide a detailed statement include the elected species or struct utility of the invention. Define any	ures, keywords, synonyms terms that may have a spe	s, acronyms, and registry ecial meaning. Give exam	numbers, and comb	ine with the conce	pt or
known. Please attach a copy of the	cover sheet, pertinent clair	ns, and abstract.	,		
Title of Invention: Methods	of treeting Wal	actic cardiany	ispathy usi	ng glycogen	phosphoryL
Inventors (please provide full nar	nes):	Treadway (2)		· · · · · · · · · · · · · · · · · · ·	inchilo itors
Earliest Priority Filing Date:	01:/24/200	20 20			- N
For Sequence Searches Only Pleas	e include all pertinent infori	mation (parent, child, divisi			th the way
appropriate serial number	He attached	compound in	conjunct	ion with	e e e e e e e e e e e e e e e e e e e
the following K	ind: In	patientar the	attached-	composed no	ames.
the statement R	y der zahibit	5)		* .	. 2
1. glycogen phosph z. diabetic	iory izse inition	(6)	~100	Transport is the survey to property if	₹ **
			,	Ω ≅ , ≥	Poir Ymas
3. diabetes			j	77.0	1.0 f
4. cardiovascula 5. heart		(7)		1. 6 E	Con.
	- h A			. 0, 4	6 - 7 P
b. ischemia (
7. reperfusion		1	.	NG 23	Ê
			1	23 110	
Thank You,		70		2002 DIV	Ĥ.
) , , , , ,		<i>\$</i>		Ď,	. , .
Billy D. C	thism -	f		* . /	
· /*	•		-	Point of Contai	
			n	703-300 TO	Ph.D
	\$ (**) .	•		703-308-7309 CM1, Rm. 6 B 0	· /
	1. 11			1	a.ss.tuse.su
*******	****	******	******	******	A CONTRACT
STAFF USE ONLY	Type of Search	Vend	ors and cost where	applicable	
Searcher: Point of Contac	t: NA Sequence (#)	STN4	31402	-	.
Thomas G. Larson, Searcher Phone #: 703-308-7309	AA Sequence (#)	Dialog	* ** **	· · · · · · · · · · · · · · · · · · ·	- <u>`</u>
Searcher Location: CM1, Rm. 6 B 0	Structure (#)	8 Questel/Orbit			
Date Searcher Picked Up:	Bibliographic	Dr.Link	477		- 1. J
Date Completed: $9/5$	Litigation	Lexis/Nexis			
Searcher Prep & Review: Time: 12.0	, Fulltext	Sequence System	s		_
Clerical Prep Time:	Patent Family	WWW/Internet _			- :
Online Time: 330	Other _	Other (specify)_		· · · · · · · · · · · · · · · · · · ·	_
PTO-1590 (8-01)	Page 1				

5

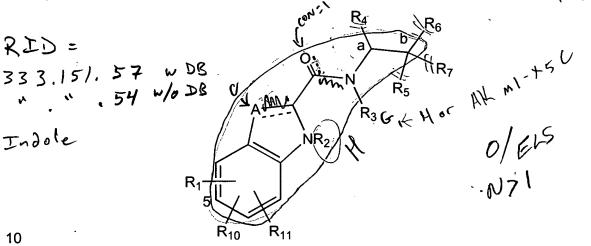
15

25

Methods for making the above recited glycogen phosphorylase inhibitors of Formula A can be found in U.S. provisional patent application number 60/157,148, filed September 30, 1999.

Commonly assigned PCT published applications WO 96/39384 and WO 96/39385 disclose glycogen phosphorylase inhibitors of Formulas I and IA below that can be used to treat diabetic cardiomyopathy in accordance with the present invention.

One group of glycogen phosphorylase inhibitors that can be used in the present invention includes compounds of Formula I



Formula I

and the pharmaceutically acceptable salts and prodrugs thereof wherein

the dotted line (---) is an optional bond;

A is -C(H)=, $-C((C_1-C_4)alkyl)=$ or -C(halo)= when the dotted line (---) is $\frac{1}{6}$ bond, or A is methylene or $-CH((C_1-C_4)alkyl)-$ when the dotted line (---) is not a bond;

 R_1 , R_{10} or R_{11} are each independently H, halo, 4-, 6- or 7-nitro, cyano, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, fluoromethyl, difluoromethyl or trifluoromethyl;

R₂ is H;

20
$$R_3$$
 is H or (C_1-C_5) alkyl;

 R_4 is H, methyl, ethyl, n-propyl, hydroxy(C_1 - C_3)alkyl, (C_1 - C_3)alkoxy(C_1 - C_3)alkyl, phenyl(C_1 - C_4)alkyl or fur-2- or -3-yl(C_1 - C_4)alkyl wherein said R_4 rings are mono-, di- or tri-substituted independently on carbon with H, halo, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, trifluoromethyl, hydroxy, amino or cyano; or

Claims

What is claimed is:

5

10

15

20

1. A method of treating diabetic cardiomyopathy, the method comprising administering to a patient having or at risk of having diabetic cardiomyopathy a therapeutically effective amount of a glycogen phosphorylase inhibitor.

2. The method of claim 1 wherein the glycogen phosphorylase inhibitor is selected from 5-chloro-1H-indole-2-carboxylic acid [(1S)-((R)-hydroxy-dimethylcarbamoyl-methyl)-2-phenyl-ethyl]-amide;

5,6-dichloro-1H-indole-2-carboxylic acid {(1S)-[(R)-hydroxy-(methoxy-methyl-carbamoyl)-methyl]-2-phenyl-ethyl}-amide;

5-chloro-1H-indole-2-carboxylic acid {(1S)-[(R)-hydroxy-(methoxy-methyl-carbamoyl)-methyl]-2-phenyl-ethyl}-amide(3)

5-chloro-1H-indole-2-carboxylic acid ((1S)-{(R)-hydroxy-[(2-hydroxy-ethyl)-methyl-carbamoyl]-methyl}-2-phenyl-ethyl)-amide;

5-chloro-1H-indole-2-carboxylic acid [(1S)-benzyl 3-((3R,4S)-dihydroxy-pyrrolidin-1-yl)-(2R)-hydroxy-3-oxo-propyl]-amide; (5)

5-chloro-1H-indole-2-carboxylic acid {(1S)-[(R)-hydroxy-(methyl-pyridin-2-yl-carbamoyl)-methyl]-2-phenyl-ethyl}-amide; or

5-chloro-1H-indole-2-carboxylic acid ((1S)-{(R)-hydroxy-[methyl-(2-pyridin-2-yl-ethyl)-carbamoyl]-methyl}-2-phenyl-ethyl)-amide, or a pharmaceutically acceptable salt or prodrug thereof, or a salt of a prodrug.

3. A method of treating diabetic cardiomyopathy, the method comprising administering to a patient having 1) diabetes and 2) cardiovascular disease, ischemic heart disease, congestive heart failure, congestive heart failure but not having coronary arteriosclerosis, hypertension, diastolic blood pressure abnormalities, microvascular diabetic complications, abnormal left ventricular function, myocardial fibrosis, abnormal cardiac function, pulmonary congestion, small vessel disease, small vessel disease without atherosclerotic cardiovascular disease or luminal narrowing, coagulopathy, cardiac contusion, or having had or at risk of having a myocardial infarction a therapeutically effective amount of a glycogen phosphorylase inhibitor.

12 90 /

=> D	QUE L32	
L1	6031	SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
		PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
L2	465	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
L3	153	SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT
		OR CARDIOVASCULAR AGENTS+NT,PFT/CT) (L) (THU OR BAC OR PAC OR
		PKT OR DMA)/RL
L4	47128	SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT
		OR DIABETES MELLITUS+NT, PFT/CT
L5 ·	. 304	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC
		CARDIOMYOPATHY"+PFT/CT
L6	287453	SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT, PFT/C
		T
L7	20270	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP
		ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
		OR ISCHEMIA+NT, PFT/CT
L8	9348	SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
		"REPERFUSION (L) INJURY"+PFT/CT
L9	335374	SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6
		OR L7 OR L8)
L10	1	SEA FILE=REGISTRY ABB=ON PLU=ON 186392-40-5/RN
L17	10	OR L7 OR L8) SEA FILE=REGISTRY ABB=ON PLU=ON 186392-40-5/RN SEA FILE=REGISTRY ABB=ON PLU=ON L10 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L17
L24	9	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L17
L31	2	SEA FILE=HCAPLUS ABB=ON PLU=ON W0199639384/PN OR W0199639385/ - Remove PN inventors: property documents SEA FILE=HCAPLUS ABB=ON PLU=ON L24 NOT L31 from answer set.
		PN inventors printly documents
L32	8	SEA FILE=HCAPLUS ABB=ON PLU=ON L24 NOT L31 from answer set.

=> FIL REG

FILE 'REGISTRY' ENTERED AT 11:56:46 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L10

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-40-5 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Point of Contact: Thomas G. Larson, Ph.D. 703-308-7309 CM1, Rm. 6 B 01

CP 91149 CN

STEREOSEARCH FS

C21 H22 Cl N3 O3 MF

SR CA

CA, CAPLUS, TOXCENTER, USPATFULL LC STN Files:

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1967 TO DATE) 10 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:57:07 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use Hits from CAPLUS with compound & key words the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L32 1-8

L32 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709687 HCAPLUS

DOCUMENT NUMBER:

135:272869

TITLE':

Synthesis of indolyl-amides as glycogen phosphorylase

inhibitors for treatment of type 2 diabetes

Searched by Thom Larson, STIC, 308-7309

```
INVENTOR(S): Treadway, Judith Lee
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
```

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                 KIND DATE
                                  APPLICATION NO. DATE
    ______
                  _____
                                   ______
                  A2 20010926 EP 2001-301979 20010305
    EP 1136071
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO
    JP 2001302546
                  A2 20011031
                                    JP 2001-78839
                                                  20010319
PRIORITY APPLN. INFO.:
                                 US 2000-191381P P 20000322
OTHER SOURCE(S):
                    MARPAT 135:272869
```

Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepd. Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temp.) to give amide II. Compds. I are glycogen phosphorylase inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

IT Diabetes mellitus

IT

(non-insulin-dependent; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

```
186392-46-1P
                              186392-47-2P
186392-40-5P
                                             186392-49-4P
186392-51-8P
              186392-52-9P
                              186392-53-0P
                                             186392-64-3P
                                                            186392-65-4P
186392-70-1P
              186429-64-1P
                              186429-91-4P
                                             186430-03-5P
                                                            186430-23-9P
186430-41-1P
              186430-83-1P
                              186431-27-6P
                                             186431-28-7P
                                                            186431-29-8P
              251446-20-5P
225929-30-6P
                              251446-21-6P
                                             251446-22-7P
                                                            251446-23-8P
                              251446-26-1P
251446-24-9P
              251446-25-0P
                                             251446-27-2P
                                                            251446-28-3P
251446-29-4P
              251446-30-7P
                              251446-31-8P
                                             251446-32-9P
                                                            251446-33-0P
                              332098-11-0P
251446-34-1P
              251446-35-2P
                                             332098-12-1P
                                                            332098-13-2P
332098-14-3P
                              332098-16-5P
              332098-15-4P
                                             332098-17-6P
                                                            332098-18-7P
332098-19-8P
              332098-20-1P
                              332098-21-2P
                                             332098-22-3P
                                                            332098-23-4P
                              332098-26-7P
332098-24-5P
              332098-25-6P
                                             332098-27-8P
                                                            332098-28-9P
332098-29-0P
              332098-30-3P
                              332098-31-4P
                                             332098-32-5P
                                                            332098-33-6P
332098-34-7P
              332098-35-8P
                              332098-36-9P
                                             332098-37-0P
                                                            332098-38-1P
332098-39-2P
              332098-40-5P
                              332098-41-6P
                                             332098-42-7P
                                                            332098-43-8P
332098-44-9P
              332098-45-0P
                              332098-46-1P
                                             332098-47-2P
                                                            332098-48-3P
332098-49-4P
              332098-50-7P
                              332098-52-9P
                                             332098-54-1P
                                                            332098-55-2P
332098-57-4P
              332098-59-6P
                              332098-61-0P
                                             332098-63-2P
                                                            332098-65-4P
362521-64-0P
              362521-65-1P
                              362521-66-2P
                                             362521-89-9P
                                                            362521-91-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
```

(drug; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

```
L32 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2002 ACS
                        2001:693054 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        135:247221
TITLE:
                        Pharmaceutical compositions containing glycogen
                        phosphorylase inhibitors
                        Hoover, Dennis Jay; Shanker, Ravi Mysore; Friesen,
INVENTOR(S):
                        Dwayne Thomas; Lorenz, Douglas Alan; Nightingale,
                        James Alan Schriver
PATENT ASSIGNEE(S):
                        Pfizer Products Inc., USA
SOURCE:
                        PCT Int. Appl., 142 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                    KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     -----
                    ----
                                          ------ -----
    WO 2001068055
                     A1
                           20010920
                                          WO 2001-IB394
                                                           20010316
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 2001053778
                      A1
                           20011220
                                         US 2001-805828 20010314
PRIORITY APPLN. INFO.:
                                       US 2000-189942P P 20000316
OTHER SOURCE(S):
                        MARPAT 135:247221
    Pharmaceutical compns. comprise a glycogen phosphorylase inhibitor and at
     least one concn.-enhancing polymer. The compn. may be a simple phys.
    mixt. of glycogen phosphorylase inhibitor and concn.-enhancing polymer or
     a dispersion of glycogen phosphorylase inhibitor and polymer.
     dispersion of 25% 5-chloro-lH-indole-2-carboxylic acid
     [(1S)-benzyl-(2R)-hydroxy-3-((3R,4S)-dihydroxypyrrolidin-1-yl)-3-
     oxypropyl]amide and 75% polymer was made by first mixing the drug in
     acetone together with HPMCAS to form a soln. The soln. comprised 1.25
     drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by
     directing an atomizing spray using a 2-fluid external-mix spray nozzle at
     2.6 bar at a feed rate of 175 to 180 g/min into the stainless-steel
    chamber of a spray-dryer, maintained at 180 degree. on the inlet and
     69.degree. at the outlet. The resulting amorphous solid spray-dried
     dispersion was collected and then dried in a solvent tray-dryer by
     spreading the spray-dried particles onto polyethylene-lined trays to a
    depth of not >1 cm and then drying them at 40.degree. for at least 8 h.
REFERENCE COUNT:
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                        4
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
IT
    Heart, disease
        (diabetic cardiomyopathy; pharmaceutical compns.
       contg. glycogen phosphorylase inhibitors)
IT
    Heart, disease
        (ischemia; pharmaceutical compns. contg. glycogen
       phosphorylase inhibitors)
IT
    Diabetes mellitus
        (non-insulin-dependent; pharmaceutical compns. contq. glycogen
       phosphorylase inhibitors)
IT
    Antitumor agents
```

```
Atherosclerosis
     Cataract
    Digestive tract
    Dissolution rate
    Drug bioavailability
    Hypercholesterolemia
    Hyperglycemia
    Hypertension
     Hypertriglyceridemia
       Ischemia
     Solubility
     Solvent effect
        (pharmaceutical compns. contg. glycogen phosphorylase inhibitors)
IT
     9035-74-9, Glycogen phosphorylase
     RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
        (inhibitors; pharmaceutical compns. contg. glycogen
       phosphorylase inhibitors)
                                186392-51-8
IT
     186392-40-5
                   186392-43-8
                                               186392-53-0
     186392-63-2
                   186392-65-4 186429-91-4
                                               186430-03-5
                                                             186430-23-9
     186430-40-0 186430-57-9 186431-27-6
                                               251446-20-5
                                                             251446-21-6
     251446-32-9
                 332098-16-5 332098-17-6
                                               361176-31-0
     RL: BPR (Biological process); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (pharmaceutical compns. contg. glycogen phosphorylase inhibitors)
L32 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                        2001:554794 HCAPLUS
DOCUMENT NUMBER:
                        135:132447
                        Chloroindolephenylethylamide analogs and their
TITLE:
                        prodrugs as glycogen phosphorylase inhibitors for
                        treatment of diabetic cardiomyopathy
INVENTOR(S):
                         Treadway, Judith Lee
PATENT ASSIGNEE(S):
                         Pfizer Products Inc., USA
                         Jpn. Kokai Tokkyo Koho, 35 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

```
PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
                    ----
                                         -----
    JP 2001206856
                    A2
                           20010731
                                        JP 2001-14036
                                                          20010123
                    A2
                           20010822
                                        EP 2001-300575
    EP 1125580
                                                          20010123
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                         US 2001-767633
                                                          20010123
    US 2001046958
                           20011129
                     A1
                                      US 2000-177770P P 20000124
PRIORITY APPLN. INFO.:
    Chloroindolephenylethylamide analogs, including 5-chloro-1H-indole-2-
    carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2-
    phenylethyl]amide, etc., and their prodrugs are claimed as glycogen
    phosphorylase inhibitors for treatment of diabetic cardiomyopathy. The
    title compds. can also combine with insulin, insulin analogs (biguanides),
     .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma.
    agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors,
    .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity
    agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose
    reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid
```

receptor antagonists, and/or thyroid hormone analogs for treatment of

diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc.

IT Blood vessel, disease

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Cardiovascular system

(disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs.
7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin,
biological studies 97322-87-7D, TroGlitazone, derivs. 186392-21-2
186392-39-2 186392-40-5 186392-49-4 186392-65-4
186392-67-6 186392-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase **inhibitors** for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

L32 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:566034 HCAPLUS

DOCUMENT NUMBER: 131:199699

TITLE: N-[(Substituted five-membered di- or triaza

diunsaturated ring) carbonyl] guanidine derivatives for

the treatment of ischemia

INVENTOR(S): Hamanaka, Ernest S.; Guzman-Perez, Angel; Ruggeri, Roger B.; Wester, Ronald T.; Mularski, Christian J.

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 246 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
    WO 9943663 A1 19990902 WO 1999-IB206 19990205
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
           DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
           KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
           MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                   CA 1999-2321642 19990205
    CA 2321642
                    AA 19990902
    AU 9920706
                     A1
                        19990915
                                       AU 1999-20706
                                                        19990205
                    B2
                         20011011
    AU 739403
                                     BR 1999-8332
                    Α
    BR 9908332
                         20001107
                                                        19990205
                                                      19990205
                                       EP 1999-901083
                        20001206
    EP 1056729
                    A1
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
            SI, LT, LV, FI, RO
                                        JP 2000-533420
                                                        19990205
    JP 2002504546
                   T2
                         20020212
                                        ZA 1999-1578
                          20000828
                                                        19990226
    ZA 9901578
                     Α
    NO 2000004192
                          20000822
                                       NO 2000-4192
                                                        20000822
                     A
                                                     P 19980227
PRIORITY APPLN. INFO.:
                                     US 1998-76362P
                                     WO 1999-IB206
                                                     W 19990205
```

OTHER SOURCE(S): MARPAT 131:199699

6

AB Guanidine derivs. ZCON:C(NH2)2 [I; Z = certain (un)substituted, diunsatd., diazoles and triazoles] and their pharmaceutically acceptable salts and/or prodrugs are disclosed, for use as inhibitors of sodium-hydrogen exchanger type 1 (NHE-1). Also disclosed are methods of using I, and pharmaceutical compns. contg. them. I are useful for the redn. of tissue damage resulting from tissue ischemia (no data). A large no. of compds. I and their intermediates were prepd. and/or specifically claimed. For instance, guanidine-HCl was converted to the free base, taken up in THF-DMF mixt., and coupled with 5-methyl-2-(2-methoxyphenyl)-2H-1,2,3-triazole-4-carboxylic acid (pre-activated with carbonyldiimidazole), and the resultant guanidine deriv. was isolated and acidified with HCl in MeOH, to give title compd. II.HCl in 17% yield.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Brain, disease

Heart, disease

Intestine, disease Kidney, disease Liver, disease Lung, disease Muscle, disease Pancreas, disease Spleen

(ischemia; prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors for treatment of ischemia)

IT Ischemia

(prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors for treatment of ischemia)

IT 9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
(Biological study)

(pharmaceuticals also contg. inhibitors of; prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors for

```
treatment of ischemia)
    110703-94-1, 3,4-Dihydro-4-oxo-3-[[5-(trifluoromethyl)-2-
TТ
    benzothiazolyl] methyl] -1-phthalazineacetic acid 186392-40-5
                               186392-53-0
                                               186392-64-3
                  186392-49-4
                                                             186392-65-4
    186392-43-8
                                               186430-03-5
                  186429-78-7
                                 186429-91-4
                                                             186430-23-9
    186429-64-1
                               186431-27-6
                                               225929-30-6
    186430-41-1
                  186430-57-9
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pharmaceuticals contg.; prepn. of diazole and triazole guanidine
```

derivs. as NHE-1 inhibitors for treatment of ischemia)

L32 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:354425 HCAPLUS

DOCUMENT NUMBER: 131:9635

TITLE: Combination of an aldose reductase inhibitor and a

glycogen phosphorylase inhibitor

INVENTOR(S): Mylari, Banavara Lakshman; Hoover, Dennis Jay; Hulin,

Bernard; Treadway, Judith Lee

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 119 pp.

SOURCE: PCT Int. Appl CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                          _____
                                          _____
                                                          ------
    WO 9926659
                      A1
                           19990603
                                          WO 1998-IB1752
                                                           19981102
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         CA 1998-2310069
    CA 2310069
                      AA
                           19990603
                                                           19981102
    AU 9895558
                           19990615
                                          AU 1998-95558
                                                           19981102
                      A1
    AU 733304
                      B2
                           20010510
    EP 1032424
                      Α1
                           20000906
                                          EP 1998-949193
                                                           19981102
                           20010912
    EP 1032424
                      В1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    BR 9814698
                           20001003
                                          BR 1998-14698
                                                           19981102
                      Α
                           20010915
                                          AT 1998-949193
    AT 205403
                      E
                                                           19981102
    ES 2161548
                                          ES 1998-949193
                      Т3
                           20011201
                                                           19981102
                                          JP 2000-521860
     JP 2002504478
                      T2
                           20020212
                                                           19981102
     ZA 9810636
                                          ZA 1998-10636
                      Α
                           20000522
                                                           19981120
                                          NO 2000-2164
    NO 2000002164
                           20000719
                                                           20000427
                      Α
                                       US 1997-66365P
PRIORITY APPLN. INFO.:
                                                        P 19971121
                                                        W 19981102
                                       WO 1998-IB1752
```

AB Pharmaceutical compns., kits and methods comprising combination of aldose reductase inhibitors (0.1-20 mg/kg) and glycogen phosphorylase inhibitors (0.1-15 mg/kg), useful for treatment of insulin resistant conditions such as diabetes, hyperglycemia, hypercholesterolemia, hypertension, hyperinsulinemia, hyperlipidemia, atherosclerosis, and tissue ischemia, etc., are described. E.g., a tablet formulation contained an active ingredient (an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, or a combination of the two) 0.25-100, starch 45, microcryst. cellulose 35, PVP (as 10% soln. in water) 4, Na CM-cellulose 4.5, Mg stearate 0.5, and talc 1 mg/tablet, resp.

```
REFERENCE COUNT:
```

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TΤ Acromegaly

Anti-infective agents Anti-ischemic agents Anticholesteremic agents Antidiabetic agents Antihypertensives Antiobesity agents Brain, disease Cardiovascular agents Drug delivery systems Heart, disease Hypolipemic agents Kidney, disease Liver, disease

3

Lung, disease

Muscle, disease

Pancreas, disease

Pregnancy

Spleen, disease

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

ITDiabetes mellitus

(non-insulin-dependent; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

TT Heart

> (surgery; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT 110703-94-1 **186392-40-5** 186392-43-8 186392-49-4

186392-53-0 186392-64-3 186429-64-1 186429-78-7 186430-11-5

186430-23-9 186430-41-1 186430-52-4 186431-27-6 208830-24-4

208830-25-5 225929-30-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT 9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

L32 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1998:450920 HCAPLUS

DOCUMENT NUMBER:

129:189205

TITLE:

Indole-2-carboxamide inhibitors of human liver

glycogen phosphorylase

AUTHOR (S):

Hoover, Dennis J.; Lefkowitz-Snow, Sheri;

Burgess-Henry, Jana L.; Martin, William H.; Armento, Sandra J.; Stock, Ingrid A.; McPherson, R. Kirk;

Genereux, Paul E.; Gibbs, E. Michael; Treadway, Judith

CORPORATE SOURCE:

Department of Cardiovascular and Metabolic Diseases Medicinal Chemistry, Central Research Division, Pfizer

Inc., Groton, CT, 06340, USA

```
Journal of Medicinal Chemistry (1998), 41(16),
SOURCE:
                         2934-2938
                         CODEN: JMCMAR; ISSN: 0022-2623
                         American Chemical Society
PUBLISHER:
                         Journal
DOCUMENT TYPE:
                         English
LANGUAGE:
     Indole-2-carboxamide derivs. (I; X = Cl, F, Br, H, OMe; R = Ph,
     cyclohexyl, H, F; Y = CONMe2, CONHMe, CO2Me, CO2H, CH2OH, CONH2, etc.)
     were prepd. I are potent inhibitors of human liver glycogen phosphorylase
     which are active in cells, and produce hypoglycemic activity on oral
     administration in a rodent model of type 2 diabetes. I [CP-320626; X =
     Cl, R = F, Y = CO(1-piperidin-4-ol)] produced oral activity at 10 mg/kg.
IT
     Diabetes mellitus
        (non-insulin-dependent; indole-2-carboxamide inhibitors of human liver
        glycogen phosphorylase)
     9035-74-9, Glycogen phosphorylase
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); MSC
     (Miscellaneous); BIOL (Biological study); PROC (Process)
        (human liver; indole-2-carboxamide inhibitors of human liver
        glycogen phosphorylase)
                                 109522-21-6P
                                                111258-71-0P
ΙT
     17186-56-0P
                   78800-68-7P
                                                               111321-55-2P
     123665-42-9P
                    186392-10-9P
                                   186392-11-0P
                                                  186392-12-1P
                                                                 186392-13-2P
     186392-22-3P
                    186392-32-5P
                                   186392-33-6P
                                                  186392-34-7P
                                                                 186392-38-1P
     186392-40-5P
                    186392-56-3P
                                   186429-59-4P
                                                  186429-60-7P
     186430-05-7P
                   186430-23-9P
                                   186430-32-0P
                                                  186430-34-2P
                                                                 186430-36-4P
     186430-37-5P
                   186430-39-7P
                                   186430-44-4P
                                                  186431-50-5P
                                                                 186431-51-6P
     186431-67-4P
                    186431-68-5P
                                   186432-24-6P
                                                  186432-25-7P
                                                                 186432-26-8P
     211677-10-0P
                    211677-11-1P
                                   211677-12-2P
                                                  211677-13-3P
                                                                 211677-14-4P
     211677-15-5P
                    211677-16-6P
                                   211677-17-7P
                                                  211677-18-8P
                                                                 211677-19-9P
     211677-20-2P
                   211677-21-3P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (indole-2-carboxamide inhibitors of human liver glycogen phosphorylase)
L32 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1998:388320 HCAPLUS
DOCUMENT NUMBER:
                         129:72196
                         Use of glycogen phosphorylase inhibitor for reducing
TITLE:
                         non-cardiac tissue damage resulting from ischemia
INVENTOR(S):
                         Hoover, Dennis J.; Martin, William Holt; Tracey, Wayne
                         Ross; Treadway, Judith Lee
PATENT ASSIGNEE(S):
                         Pfizer Inc., USA
                         Eur. Pat. Appl., 52 pp.
SOURCE:
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 846464	A2	19980610	EP 1997-309727	19971203
EP 846464	A3	19990217		
R: AT, BE,	CH, DE	, DK, ES, FR,	GB, GR, IT, LI, LU	, NL, SE, MC, PT,
IE, SI,	LT, LV	, FI, RO		
US 5952322	A	19990914	US 1997-978384	19971125
CA 2223317	AA	19980605	CA 1997-2223317	19971203
JP 10194990	A2	19980728	JP 1997-332523	19971203
JP 3277147	B2	20020422		

```
19980611
                                           AU 1997-46869
     AU 9746869
                       A1
                                                            19971204
                            20000330
    AU 717547
                       B2
                       Α
                            19990604
     ZA 9710907
                                           ZA 1997-10907
                                                            19971204
PRIORITY APPLN. INFO.:
                                        US 1996-31584P P 19961205
OTHER SOURCE(S):
                         MARPAT 129:72196
     The use of a glycogen phosphorylase inhibitor for the manuf. of a
     medicament for reducing non-cardiac tissue damage resulting from ischemia
     or hypoxia. The tissue is brain, liver, kidney, lung, gut, skeletal
     muscle, spleen, pancreas, nerve, spinal code, retina tissue, the
     vasculature or intestinal tissue. Said glycogen phosphorylase inhibitor
     is represented by a compd. of formula [I; A = C(X): (wherein X = H, C1-4
     alkyl, halo) when the dotted line is a bond; A = CH2 or CH(C1-4 alkyl)
     when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6-, or
     7-NO2, cyano, C1-4 alkyl or alkoxy, CH2F, CF2H, CF3; R2 = H; R3 = H, C1-5
     alkyl; R4 = H, Me, Et, n-Pr, C1-3 hydroxyalkyl, C1-3 alkoxy-C1-3 alkyl,
    phenyl-C1-4 alkyl, thien-2- or -3-yl-C1-4 alkyl, furan-2- or -3-yl-C1-4
     alkyl, etc.; R5 = H, OH, F, C1-5 alkyl or alkoxy, C1-6 alkanoyl,
     amino-C1-4 alkoxy, mono-N- or di-N, N-C1-4 alkyl amino-C1-4 alkoxy,
     carboxy-C1-4 alkoxy, etc.; R7 = H, F, C1-5 alkyl; or R5 and R7 are taken
     together to form oxo; R6 = CO2H, C1-8 alkoxycarbonyl, (un)substituted
     CONH2, COR12; wherein R12 = piperazin-1-yl, 4-(C1-4 alkyl)piperazin-1-yl,
     4-formylpiperazin-1-yl, morpholino, thiomorpholino, 1-oxothiomorpholino,
     1,1-dioxothiomorpholino, thizolidin-3-yl, etc.], e.g. indolecarboxamide
     (II) which inhibited human liver glycogen phosphorylase a (HLGPa) and
    human muscle glycogen phosphorylase a (HMGPa) with IC50 of 45 and 85 nM,
    resp.
IT
    Blood vessel, disease
    Brain, disease
     Intestine, disease
     Intestine, disease
    Kidney, disease
    Liver, disease
    Lung, disease
    Nerve, disease
    Pancreas, disease
    Pancreas, disease
     Spinal cord
        (injury; use of glycogen phosphorylase inhibitor for reducing
       non-cardiac tissue damage resulting from ischemia or hypoxia)
ΙT
    Animal tissue
    Digestive tract
    Hypoxia, animal
      Ischemia
    Spleen
        (use of glycogen phosphorylase inhibitor for reducing non-cardiac
        tissue damage resulting from ischemia or hypoxia)
IT
    186392-40-5
                   186392-43-8
                                 186392-46-1
                                               186392-49-4
     186392-53-0
                   186392-64-3
                                 186429-66-3
                                               186430-04-6
                                                             186430-23-9
    186430-40-0
                   186431-27-6
                                 186431-28-7
                                               208830-24-4
                                                             208830-25-5
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (use of glycogen phosphorylase inhibitor for reducing non-cardiac
        tissue damage resulting from ischemia or hypoxia)
TT
    186392-40-5
                   186392-43-8
                                 186392-46-1
                                               186392-49-4
    186392-53-0
                   186392-64-3
                                 186429-66-3
                                               186430-04-6
                                                             186430-23-9
    186430-40-0
                  186431-27-6
                                 186431-28-7
                                               208830-24-4
                                                             208830-25-5
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
```

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:121995 HCAPLUS

DOCUMENT NUMBER: 128:252809

TITLE: Discovery of a human liver glycogen phosphorylase

inhibitor that lowers blood glucose in vivo

AUTHOR(S): Martin, William H.; Hoover, Dennis J.; Armento, Sandra

J.; Stock, Ingrid A.; Mcpherson, R. Kirk; Danley, Dennis E.; Stevenson, Ralph W.; Barrett, Eugene J.;

Treadway, Judith L.

CORPORATE SOURCE: Central Research Division, Department of Exploratory

Medicinal Biology, Pfizer, Inc, Groton, CT, 06340, USA Proceedings of the National Academy of Sciences of the

United States of America (1998), 95(4), 1776-1781

CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

PUBLISHER:

An inhibitor of human liver glycogen phosphorylase a (HLGPa) has been identified and characterized in vitro and in vivo. This substance, [R-(R*,S*)]-5-chloro-N-[3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]-1H-indole-2-carboxamide (CP-91149), inhibited HLGPa with an IC50 of 0.13 .mu.M in the presence of 7.5 mM glucose. CP-91149 resembles caffeine, a known allosteric phosphorylase inhibitor, in that it is 5- to 10-fold less potent in the absence of glucose. Further anal., however, suggests that CP-91149 and caffeine are kinetically distinct. Functionally, CP-91149 inhibited glucagon-stimulated glycogenolysis in isolated rat hepatocytes (P < 0.05 at 10-100 .mu.M) and in primary human hepatocytes (2.1 .mu.M IC50). In vivo, oral administration of CP-91149 to diabetic ob/ob mice at 25-50 mg/kg resulted in rapid (3 h) glucose lowering by 100-120 mg/dL (P < 0.001) without producing hypoglycemia. Further, CP-91149 treatment did not lower glucose levels in normoglycemic, nondiabetic mice. In ob/ob mice pretreated with 14C-glucose to label liver glycogen, CP-91149 administration reduced 14C-glycogen breakdown, confirming that glucose lowering resulted from inhibition of glycogenolysis in vivo. These findings support the use of CP-91149 in investigating glycogenolytic vs. gluconeogenic flux in hepatic glucose prodn., and they demonstrate that glycogenolysis inhibitors may be useful in the treatment of type 2 diabetes.

IT Diabetes mellitus

(non-insulin-dependent; blood glucose lowering by CP-91149, oral inhibitor of human liver glycogen phosphorylase, in model of type II diabetes)

IT 186392-40-5P, CP 91149

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(blood glucose lowering by CP-91149, oral inhibitor of human liver

(blood glucose lowering by CP-91149, oral inhibitor of human liver glycogen phosphorylase, in model of type II diabetes)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 11:58:20 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Aug 30, 2002 (20020830/UP).

```
=> D QUE L33
           6031 SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
L1
                PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
           465 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
L2
           153 SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT
L3
                OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR
                PKT OR DMA)/RL
          47128 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT
L4
                OR DIABETES MELLITUS+NT, PFT/CT
            304 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 "HEART, DISEASE (L) DIABETIC
L5
                CARDIOMYOPATHY"+PFT/CT
L6
         287453 SEA FILE=HCAPLUS ABB=ON
                                       PLU=ON
                                                CARDIOVASCULAR SYSTEM+NT, PFT/C
                т
L7
          20270 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 "HEART, DISEASE (L) CARDIOMYOP
                ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
                OR ISCHEMIA+NT, PFT/CT
           9348 SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
L8
                "REPERFUSION (L) INJURY"+PFT/CT
         335374 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 (L2 OR L3 OR L4 OR L5 OR L6
L9
                                                                   dain 2, 2nd comound
                OR L7 OR L8)
              1 SEA FILE=REGISTRY ABB=ON PLU=ON 186392-39-2/RN
L11
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
L18
              2 SEA FILE=HCAPLUS ABB=ON
                                        PLU=ON
                                                L9 AND L18
L25
              2 SEA FILE=HCAPLUS ABB=ON
                                        PLU=ON
                                                WO199639384/PN OR WO199639385/
L31
               ΡN
L33
              1 SEA FILE=HCAPLUS ABB=ON
                                       PLU=ON L25 NOT L31
```

=> FIL REG

FILE 'REGISTRY' ENTERED AT 11:58:51 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L11

- L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
- RN 186392-39-2 REGISTRY
- CN 1H-Indole-2-carboxamide, 5,6-dichloro-N-[(1S,2R)-2-hydroxy-3-

(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5,6-dichloro-N-[2-hydroxy-3-(methoxymethylamino)-

3-oxo-1-(phenylmethyl)propyl]-, [R-(R*,S*)]-

STEREOSEARCH FS

C21 H21 Cl2 N3 O4 MF

CA SR

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:00:12 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file. koy words & compound

=> D IBIB AB HIT L33

L33 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:554794 HCAPLUS

DOCUMENT NUMBER:

135:132447

TITLE:

Chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for

Searched by Thom Larson, STIC, 308-7309

treatment of diabetic cardiomyopathy

Treadway, Judith Lee INVENTOR(S):

Pfizer Products Inc., USA PATENT ASSIGNEE(S): SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001206856	A2	20010731	JP 2001-14036	20010123
EP 1125580	A2	20010822	EP 2001-300575	20010123
2 22 22	arr bb	DW 00 00	an an	

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

US 2001046958 A1 20011129 US 2001-767633 20010123 PRIORITY APPLN. INFO.: US 2000-177770P P 20000124

Chloroindolephenylethylamide analogs, including 5-chloro-1H-indole-2carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2phenylethyl]amide, etc., and their prodrugs are claimed as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy. title compds. can also combine with insulin, insulin analogs (biquanides), .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma. agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors, .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid receptor antagonists, and/or thyroid hormone analogs for treatment of diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc.

IT Blood vessel, disease

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Cardiovascular system

(disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

TT Heart, disease

(failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs. 7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin, 97322-87-7D, TroGlitazone, derivs. 186392-21-2 biological studies

```
186392-39-2 186392-40-5 186392-49-4 186392-65-4 186392-67-6 186392-70-1
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase **inhibitors** for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 12:00:31 ON 05 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Aug 30, 2002 (20020830/UP).

=> D	QUE L34	
L1	6031	SEA/FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
		PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
L2	465	SEA FILE = HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
L3	153	SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR PKT OR DMA)/RL
L4	47128	SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT OR DIABETES MELLITUS+NT, PFT/CT
L5	304	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC CARDIOMYOPATHY"+PFT/CT
L6	287453	SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT, PFT/C
L7	20270	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT OR ISCHEMIA+NT, PFT/CT
L8	9348	SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR "REPERFUSION (L) INJURY"+PFT/CT
Ь9		SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8)
L12	1	SEA FILE=REGISTRY ABB=ON PLU=ON 186392-43-8/RN Claim 2, 3rd compound
L19	7	SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L26	6	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L19
L31	2	SEA FILE=HCAPLUS ABB=ON PLU=ON WO199639384/PN OR WO199639385/PN
L34	5	SEA FILE=HCAPLUS ABB=ON PLU=ON L26 NOT L31

=> FIL REG

FILE 'REGISTRY' ENTERED AT 12:02:03 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS) STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L12

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-43-8 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]-, [R-(R*,S*)]-

FS STEREOSEARCH

MF C21 H22 Cl N3 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1967 TO DATE)

7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:02:21 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the

the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L34 1-5

HIS In CAPILLES

L34 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:693054 HCAPLUS

DOCUMENT NUMBER:

135:247221

TITLE:

Pharmaceutical compositions containing glycogen

phosphorylase inhibitors

INVENTOR(S):

Hoover, Dennis Jay; Shanker, Ravi Mysore; Friesen,

Dwayne Thomas; Lorenz, Douglas Alan; Nightingale,

James Alan Schriver

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Products Inc., USA PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
                   ----
    -----
                         -----
                                        -----
    WO 2001068055
                    A1 20010920
                                       WO 2001-IB394
                                                       20010316
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                       20010314
    US 2001053778
                     A1 20011220
                                        US 2001-805828
PRIORITY APPLN. INFO.:
                                     US 2000-189942P P 20000316
                       MARPAT 135:247221
OTHER SOURCE(S):
```

Pharmaceutical compns. comprise a glycogen phosphorylase inhibitor and at least one concn.-enhancing polymer. The compn. may be a simple phys. mixt. of glycogen phosphorylase inhibitor and concn.-enhancing polymer or a dispersion of glycogen phosphorylase inhibitor and polymer. dispersion of 25% 5-chloro-lH-indole-2-carboxylic acid [(1S)-benzyl-(2R)-hydroxy-3-((3R,4S)-dihydroxypyrrolidin-1-yl)-3oxypropyl]amide and 75% polymer was made by first mixing the drug in acetone together with HPMCAS to form a soln. The soln. comprised 1.25 drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by directing an atomizing spray using a 2-fluid external-mix spray nozzle at 2.6 bar at a feed rate of 175 to 180 g/min into the stainless-steel

B. Chism; 09/767,633 chamber of a spray-dryer, maintained at 180.degree. on the inlet and 69.degree. at the outlet. The resulting amorphous solid spray-dried dispersion was collected and then dried in a solvent tray-dryer by spreading the spray-dried particles onto polyethylene-lined trays to a depth of not >1 cm and then drying them at 40.degree. for at least 8 h. THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT Heart, disease IT (diabetic cardiomyopathy; pharmaceutical compns. contg. glycogen phosphorylase inhibitors) TΤ Heart, disease (ischemia; pharmaceutical compns. contg. glycogen phosphorylase inhibitors) IT Diabetes mellitus (non-insulin-dependent; pharmaceutical compns. contg. glycogen phosphorylase inhibitors) IT Antitumor agents Atherosclerosis Cataract Digestive tract Dissolution rate Drug bioavailability Hypercholesterolemia Hyperglycemia Hypertension Hypertriglyceridemia Ischemia Solubility Solvent effect (pharmaceutical compns. contq. glycogen phosphorylase inhibitors) 9035-74-9, Glycogen phosphorylase RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (inhibitors; pharmaceutical compns. contg. glycogen phosphorylase inhibitors) 186392-51-8 186392-53-0 IT 186392-40-5 **186392-43-8** 186429-91-4 186430-03-5 186430-23-9 186392-63-2 186392-65-4 186431-27-6 251446-20-5 251446-21-6 186430-40-0 186430-57-9

IT 186392-40-5 186392-43-8 186392-51-8 186392-53-0
186392-63-2 186392-65-4 186429-91-4 186430-03-5 186430-23-9
186430-40-0 186430-57-9 186431-27-6 251446-20-5 251446-21-6
251446-32-9 332098-16-5 332098-17-6 361176-31-0
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pharmaceutical compns. contg. glycogen phosphorylase inhibitors)

L34 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:566034 HCAPLUS

DOCUMENT NUMBER:

131:199699

TITLE:

N-[(Substituted five-membered di- or triaza

diunsaturated ring) carbonyl] guanidine derivatives for

the treatment of ischemia

INVENTOR(S):

Hamanaka, Ernest S.; Guzman-Perez, Angel; Ruggeri, Roger B.; Wester, Ronald T.; Mularski, Christian J.

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 246 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

```
-----
                     A1 19990902
                                           WO 1999-IB206 19990205
     WO 9943663
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
            KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
         TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2321642
                            19990902
                                           CA 1999-2321642 19990205
                       AA
                                           AU 1999-20706
     AU 9920706
                       Α1
                            19990915
                                                            19990205
     AU 739403
                       B2
                            20011011
     BR 9908332
                       Α
                            20001107
                                           BR 1999-8332
                                                            19990205
                                           EP 1999-901083
     EP 1056729
                       A1
                            20001206
                                                            19990205
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             SI, LT, LV, FI, RO
                                           JP 2000-533420
     JP 2002504546
                       T2
                            20020212
                                                            19990205
     ZA 9901578
                       Α
                            20000828
                                           ZA 1999-1578
                                                            19990226
     NO 2000004192
                       Α
                            20000822
                                           NO 2000-4192
                                                            20000822
PRIORITY APPLN. INFO.:
                                        US 1998-76362P
                                                         P 19980227
                                        WO 1999-IB206
                                                         W 19990205
OTHER SOURCE(S):
                         MARPAT 131:199699
     Guanidine derivs. ZCON:C(NH2)2 [I; Z = certain (un)substituted, diunsatd.,
     diazoles and triazoles] and their pharmaceutically acceptable salts and/or
     prodrugs are disclosed, for use as inhibitors of sodium-hydrogen exchanger
     type 1 (NHE-1). Also disclosed are methods of using I, and pharmaceutical
     compns. contg. them. I are useful for the redn. of tissue damage
     resulting from tissue ischemia (no data). A large no. of compds. I and
     their intermediates were prepd. and/or specifically claimed. For
     instance, quanidine-HCl was converted to the free base, taken up in
     THF-DMF mixt., and coupled with 5-methyl-2-(2-methoxyphenyl)-2H-1,2,3-
     triazole-4-carboxylic acid (pre-activated with carbonyldiimidazole), and
     the resultant guanidine deriv. was isolated and acidified with HCl in
     MeOH, to give title compd. II.HCl in 17% yield.
REFERENCE COUNT:
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                         6
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     Brain, disease
TT
       Heart, disease
     Intestine, disease
     Kidney, disease
     Liver, disease
     Lung, disease
     Muscle, disease
     Pancreas, disease
     Spleen
        (ischemia; prepn. of diazole and triazole guanidine derivs.
        as NHE-1 inhibitors for treatment of ischemia)
IT
     Ischemia
        (prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors
        for treatment of ischemia)
     9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase
IT
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (pharmaceuticals also contg. inhibitors of; prepn. of diazole
        and triazole guanidine derivs. as NHE-1 inhibitors for
        treatment of ischemia)
     110703-94-1, 3,4-Dihydro-4-oxo-3-[[5-(trifluoromethyl)-2-
IT
```

186392-40-5

benzothiazolyl]methyl]-1-phthalazineacetic acid

```
186392-43-8 186392-49-4 186392-53-0 186392-64-3
186392-65-4 186429-64-1 186429-78-7 186429-91-4 186430-03-5
186430-23-9 186430-41-1 186430-57-9 186431-27-6 225929-30-6
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (pharmaceuticals contg.; prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors for treatment of ischemia)
```

L34 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:354425 HCAPLUS

DOCUMENT NUMBER: 131:9635

TITLE: Combination of an aldose reductase inhibitor and a

glycogen phosphorylase inhibitor

INVENTOR(S): Mylari, Banavara Lakshman; Hoover, Dennis Jay; Hulin,

Bernard; Treadway, Judith Lee

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
KIND DATE
    PATENT NO.
                                      APPLICATION NO. DATE
    WO 9926659 A1 19990603 WO 1998-IB1752 19981102
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
           DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
           KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
           MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
           TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
           FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
           CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                        19990603 CA 1998-2310069 19981102
    CA 2310069
                    AA
                                      AU 1998-95558 19981102
    AU 9895558
                    A1
                         19990615
    AU 733304
                   B2
                         20010510
    EP 1032424
EP 1032424
                                      EP 1998-949193 19981102
                   A1
                         20000906
                   B1
                         20010912
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    BR 9814698 A 20001003 BR 1998-14698 19981102
                    E
    AT 205403
                        20010915
                                      AT 1998-949193 19981102
    ES 2161548
                    T3 20011201
                                      ES 1998-949193 19981102
                   T2 20020212
                                      JP 2000-521860 19981102
    JP 2002504478
    ZA 9810636 A 20000522
NO 2000002164 A 20000719
                                      ZA 1998-10636 19981120
                                       NO 2000-2164
                                                      20000427
PRIORITY APPLN. INFO.:
                                    US 1997-66365P P 19971121
                                    WO 1998-IB1752 W 19981102
```

AB Pharmaceutical compns., kits and methods comprising combination of aldose reductase inhibitors (0.1-20 mg/kg) and glycogen phosphorylase inhibitors (0.1-15 mg/kg), useful for treatment of insulin resistant conditions such as diabetes, hyperglycemia, hypercholesterolemia, hypertension, hyperinsulinemia, hyperlipidemia, atherosclerosis, and tissue ischemia, etc., are described. E.g., a tablet formulation contained an active ingredient (an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, or a combination of the two) 0.25-100, starch 45, microcryst. cellulose 35, PVP (as 10% soln. in water) 4, Na CM-cellulose 4.5, Mg stearate 0.5, and talc 1 mg/tablet, resp.

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Acromegaly

Anti-infective agents Anti-ischemic agents Anticholesteremic agents Antidiabetic agents Antihypertensives Antiobesity agents Brain, disease Cardiovascular agents Drug delivery systems Heart, disease Hypolipemic agents Kidney, disease Liver, disease Lung, disease Muscle, disease Pancreas, disease Pregnancy Spleen, disease

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT Diabetes mellitus

(non-insulin-dependent; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT Heart

(surgery; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT 110703-94-1 186392-40-5 **186392-43-8** 186392-49-4

 186392-53-0
 186392-64-3
 186429-64-1
 186429-78-7
 186430-11-5

 186430-23-9
 186430-41-1
 186430-52-4
 186431-27-6
 208830-24-4

208830-25-5 225929-30-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

IT 9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)

(compns. for **inhibitors** of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

L34 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:193899 HCAPLUS

DOCUMENT NUMBER: 130:227741

TITLE: Solid pharmaceutical dispersions with enhanced

bioavailability

INVENTOR(S): Curatolo, William John; Herbig, Scott Max;

Nightingale, James Alan Schriver

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: Eur. Pat. Appl., 46 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
----
                           -----
                                          -----
    EP 901786
                      A2
                           19990317
                                         EP 1998-305960
                                                          19980727
    EP 901786
                     A3 20000119
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                           19990217
     CN 1207896
                                          CN 1998-116282
                                                          19980810
                     Α
     JP 11116502
                      A2
                           19990427
                                         JP 1998-227328
                                                          19980811
     JP 2984661
                      В2
                           19991129
     BR 9803144
                     Α
                           20000111
                                         BR 1998-3144
                                                          19980811
                     A1
     US 2002009494
                                         US 2001-770562
                           20020124
                                                          20010126
PRIORITY APPLN. INFO.:
                                       US 1997-55221P P 19970811
                                       US 1998-131019
                                                      B1 19980807
     Spray dried solid dispersions comprising a sparingly sol. drug and
AB
     hydroxypropyl Me cellulose acetate succinate (HPMCAS) provide increased
     aq. soly. and/or bioavailability in a use environment. Spray dried
     compns. were prepd. from HPMCAS and compds. such as ziprasidone,
     griseofulvin, nifedipine and phenytoin.
     9015-71-8, Corticotropin releasing hormone 9035-74-9, Glycogen
IT
                    80619-02-9, 5-Lipoxygenase
     phosphorylase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; solid pharmaceutical dispersions with enhanced
       bioavailability)
IT
     57-41-0, Phenytoin
                        126-07-8, Griseofulvin
                                                 21829-25-4, Nifedipine
     71138-97-1, Hydroxypropyl methyl cellulose acetate succinate
     146939-27-7, Ziprasidone
                               175139-41-0
                                           175140-00-8 186392-43-8
     186392-65-4 221163-46-8
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (solid pharmaceutical dispersions with enhanced bioavailability)
L34 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                       1998:388320 HCAPLUS
DOCUMENT NUMBER:
                        129:72196
TITLE:
                        Use of glycogen phosphorylase inhibitor for reducing
                        non-cardiac tissue damage resulting from ischemia
INVENTOR(S):
                        Hoover, Dennis J.; Martin, William Holt; Tracey, Wayne
                        Ross; Treadway, Judith Lee
PATENT ASSIGNEE(S):
                        Pfizer Inc., USA
SOURCE:
                        Eur. Pat. Appl., 52 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
     ------
                                        EP 1997-309727 19971203
    EP 846464
                     A2
                           19980610
                     A3
                         19990217
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    US 5952322
                     Α
                           19990914
                                         US 1997-978384
                                                          19971125
    CA 2223317
                           19980605
                                         CA 1997-2223317
                      AA
                                                          19971203
    JP 10194990
                      A2
                           19980728
                                         JP 1997-332523
                                                          19971203
    JP 3277147
                     B2
                           20020422
    AU 9746869
                     A1
                           19980611
                                         AU 1997-46869
                                                          19971204
    AU 717547
                     B2
                           20000330
     ZA 9710907
                           19990604
                     Α
                                          ZA 1997-10907
                                                          19971204
                                       US 1996-31584P P 19961205
PRIORITY APPLN. INFO.:
```

MARPAT 129:72196

OTHER SOURCE(S):

The use of a glycogen phosphorylase inhibitor for the manuf. of a AB medicament for reducing non-cardiac tissue damage resulting from ischemia or hypoxia. The tissue is brain, liver, kidney, lung, gut, skeletal muscle, spleen, pancreas, nerve, spinal code, retina tissue, the vasculature or intestinal tissue. Said glycogen phosphorylase inhibitor is represented by a compd. of formula [I; A = C(X): (wherein X = H, C1-4)]alkyl, halo) when the dotted line is a bond; A = CH2 or CH(C1-4 alkyl) when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6-, or 7-NO2, cyano, C1-4 alkyl or alkoxy, CH2F, CF2H, CF3; R2 = H; R3 = H, C1-5 alkyl; R4 = H, Me, Et, n-Pr, C1-3 hydroxyalkyl, C1-3 alkoxy-C1-3 alkyl, phenyl-C1-4 alkyl, thien-2- or -3-yl-C1-4 alkyl, furan-2- or -3-yl-C1-4 alkyl, etc.; R5 = H, OH, F, C1-5 alkyl or alkoxy, C1-6 alkanoyl, amino-C1-4 alkoxy, mono-N- or di-N, N-C1-4 alkyl amino-C1-4 alkoxy, carboxy-C1-4 alkoxy, etc.; R7 = H, F, C1-5 alkyl; or R5 and R7 are taken together to form oxo; R6 = CO2H, C1-8 alkoxycarbonyl, (un) substituted CONH2, COR12; wherein R12 = piperazin-1-yl, 4-(C1-4 alkyl)piperazin-1-yl, 4-formylpiperazin-1-yl, morpholino, thiomorpholino, 1-oxothiomorpholino, 1,1-dioxothiomorpholino, thizolidin-3-yl, etc.], e.g. indolecarboxamide (II) which inhibited human liver glycogen phosphorylase a (HLGPa) and human muscle glycogen phosphorylase a (HMGPa) with IC50 of 45 and 85 nM, resp.

IT Blood vessel, disease

Brain, disease
Intestine, disease
Intestine, disease
Kidney, disease
Liver, disease
Lung, disease
Nerve, disease
Pancreas, disease
Pancreas, disease
Spinal cord

(injury; use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from **ischemia** or hypoxia)

IT Animal tissue

Digestive tract

Hypoxia, animal

Ischemia

Spleen

IT

ΙT

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

186392-40-5 186392-43-8 186392-46-1 186392-49-4
186392-53-0 186392-64-3 186429-66-3 186430-04-6 186430-23-9
186430-40-0 186431-27-6 186431-28-7 208830-24-4 208830-25-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

186392-40-5 186392-43-8 186392-46-1 186392-49-4
186392-53-0 186392-64-3 186429-66-3 186430-04-6 186430-23-9
186430-40-0 186431-27-6 186431-28-7 208830-24-4 208830-25-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 12:04:17 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Aug 30, 2002 (20020830/UP).

	=> D QUE	L35	,
	L1	6031	SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
			PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
	L2	465	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
	L3	153	SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT
			OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR
			PKT OR DMA)/RL
	L4	47128	SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT
			OR DIABETES MELLITUS+NT, PFT/CT
	L5	304	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC
			CARDIOMYOPATHY"+PFT/CT
	L6	287453	SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT, PFT/C
			T
-	L7	20270	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP
			ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
	T 0	0240	OR ISCHEMIA+NT, PFT/CT
	L8	9348	SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
	L9	225254	"REPERFUSION (L) INJURY"+PFT/CT
	119	3353/4	SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8)
	L13	1	CEN PILE PEGICETRY ADDON DILLON 196202 40 4/DN -1 4 5 4/DN -1
	L20	7	SEA FILE=REGISTRY ABB=ON PLU=ON 186392-49-4/RN Claim 2, 4th Compound SEA FILE=HCAPLUS ABB=ON PLU=ON L13
	L27	•	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L20
	L31		SEA FILE=HCAPLUS ABB=ON PLU=ON WO199639384/PN OR WO199639385/
	1 31	2	PN
	L35	. 5	SEA FILE=HCAPLUS ABB=ON PLU=ON L27 NOT L31
		,	OUT TEST TOO ADD-ON TEST NOT UST

=> FIL REG

FILE 'REGISTRY' ENTERED AT 12:04:47 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L13

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-49-4 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(2-hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-hydroxy-3-[(2-hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]-, [R-(R*,S*)]-

FS STEREOSEARCH

MF C22 H24 Cl N3 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:05:02 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L35 1-5

L35 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709687 HCAPLUS

DOCUMENT NUMBER: 135:272869

TITLE: Synthesis of indolyl-amides as glycogen phosphorylase

inhibitors for treatment of type 2 diabetes

INVENTOR(S): Treadway, Judith Lee PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: Eur. Pat. Appl., 78 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A2 20010926 EP 2001-301979 20010305 ----**---**----EP 1136071 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2001302546 A2 20011031 JP 2001-78839 20010319

PRIORITY APPLN. INFO.: US 2000-191381P P 20000322

MARPAT 135:272869 OTHER SOURCE(S):

Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepd. Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temp.) to give amide II. I are glycogen phosphorylase inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

IT Diabetes mellitus

(non-insulin-dependent; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

```
IT
    186392-40-5P
                  186392-46-1P
                                 186392-47-2P 186392-49-4P
    186392-51-8P
                   186392-52-9P
                                 186392-53-0P
                                                186392-64-3P
                                                              186392-65-4P
                                 186429-91-4P
    186392-70-1P
                  186429-64-1P
                                                186430-03-5P
                                                              186430-23-9P
                                 186431-27-6P
    186430-41-1P
                  186430-83-1P
                                                186431-28-7P
                                                              186431-29-8P
    225929-30-6P
                  251446-20-5P
                                 251446-21-6P
                                                251446-22-7P
                                                              251446-23-8P
    251446-24-9P
                 251446-25-0P
                                 251446-26-1P
                                                251446-27-2P
                                                              251446-28-3P
    251446-29-4P
                 251446-30-7P
                                 251446-31-8P
                                                251446-32-9P
                                                              251446-33-0P
    251446-34-1P
                  251446-35-2P
                                 332098-11-0P
                                                332098-12-1P
                                                              332098-13-2P
    332098-14-3P
                 332098-15-4P
                                 332098-16-5P
                                                332098-17-6P
                                                              332098-18-7P
    332098-19-8P
                 332098-20-1P
                                 332098-21-2P
                                                332098-22-3P
                                                              332098-23-4P
    332098-24-5P
                 332098-25-6P
                                 332098-26-7P
                                                332098-27-8P
                                                              332098-28-9P
    332098-29-0P
                 332098-30-3P
                                 332098-31-4P
                                                332098-32-5P
                                                              332098-33-6P
    332098-34-7P
                 332098-35-8P
                                 332098-36-9P
                                                332098-37-0P
                                                              332098-38-1P
    332098-39-2P
                 332098-40-5P
                                 332098-41-6P
                                                332098-42-7P
                                                              332098-43-8P
    332098-44-9P
                 332098-45-0P
                                 332098-46-1P
                                                332098-47-2P
                                                              332098-48-3P
    332098-49-4P 332098-50-7P
                                 332098-52-9P
                                                332098-54-1P
                                                              332098-55-2P
```

332098-61-0P 332098-57-4P 332098-59-6P 332098-63-2P 332098-65-4P 362521-64-0P 362521-65-1P 362521-66-2P 362521-89-9P 362521-91-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

L35 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS

2001:554794 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:132447

TITLE: Chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for

treatment of diabetic cardiomyopathy

Treadway, Judith Lee INVENTOR(S): PATENT ASSIGNEE(S): Pfizer Products Inc., USA Jpn. Kokai Tokkyo Koho, 35 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ---------_____ A2 20010731 JP 2001-14036 A2 20010822 EP 2001-300575 JP 2001206856 A2 20010123 EP 2001-300575 20010123 EP 1125580 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

US 2001-767633 A1 20010123 US 2001046958 20011129 PRIORITY APPLN. INFO.: US 2000-177770P P 20000124

Chloroindolephenylethylamide analogs, including 5-chloro-1H-indole-2carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2phenylethyl]amide, etc., and their prodrugs are claimed as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy. The title compds. can also combine with insulin, insulin analogs (biguanides), .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma. agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors, .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid receptor antagonists, and/or thyroid hormone analogs for treatment of diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc.

ΙT Blood vessel, disease

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Cardiovascular system

(disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

Heart, disease IT

(failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic

cardiomyopathy and other cardiovascular diseases)

Heart, disease TΤ

> (infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

Heart, disease TΤ

> (ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs. IT 7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin, biological studies 97322-87-7D, TroGlitazone, derivs. 186392-21-2 186392-40-5 **186392-49-4** 186392-65-4 186392-39-2 186392-67-6 186392-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

L35 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS 1999:566034 HCAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 131:199699

TITLE: N-[(Substituted five-membered di- or triaza

diunsaturated ring) carbonyl] quanidine derivatives for

the treatment of ischemia

INVENTOR(S): Hamanaka, Ernest S.; Guzman-Perez, Angel; Ruggeri,

Roger B.; Wester, Ronald T.; Mularski, Christian J. Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 246 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.				KI	ND :	DATE			A.	PPLI	CATI	ON N	ο.	DATE			
									-								
WO	9943	663		A	1	1999	0902		W	0 19	99-I	B206		1999	0205		
	W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
	•	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
		ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,
		TR,	TT,	UA,	UG,	US,	UΖ,	VN,	ΥU,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,
		ТJ,	TM														
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG						
CA	2321	642		A	A	1999	0902		CA 1999-2321642 19990					0205			
ΑU	9920	706		Α	1	1999	0915		A	U 19	99-2	0706		1999	0205		
AU	7394	03		B	2	2001	1011										
BR	9908	332		А		2000	1107		B	R 19	99-8	332		1999	0205		

```
20001206
     EP 1056729
                                           EP 1999-901083
                                                            19990205
                      A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             SI, LT, LV, FI, RO
     JP 2002504546
                       T2
                            20020212
                                           JP 2000-533420
                                                            19990205
     ZA 9901578
                       Α
                            20000828
                                           ZA 1999-1578
                                                            19990226
     NO 2000004192
                      Α
                            20000822
                                           NO 2000-4192
                                                            20000822
PRIORITY APPLN. INFO.:
                                        US 1998-76362P
                                                         P
                                                            19980227
                                        WO 1999-IB206
                                                         W 19990205
OTHER SOURCE(S):
                         MARPAT 131:199699
     Guanidine derivs. ZCON:C(NH2)2 [I; Z = certain (un)substituted, diunsatd.,
     diazoles and triazoles] and their pharmaceutically acceptable salts and/or
     prodrugs are disclosed, for use as inhibitors of sodium-hydrogen exchanger
     type 1 (NHE-1). Also disclosed are methods of using I, and pharmaceutical
     compns. contg. them. I are useful for the redn. of tissue damage
     resulting from tissue ischemia (no data). A large no. of compds. I and
     their intermediates were prepd. and/or specifically claimed. For
     instance, guanidine-HCl was converted to the free base, taken up in
     THF-DMF mixt., and coupled with 5-methyl-2-(2-methoxyphenyl)-2H-1,2,3-
     triazole-4-carboxylic acid (pre-activated with carbonyldiimidazole), and
     the resultant guanidine deriv. was isolated and acidified with HCl in
     MeOH, to give title compd. II.HCl in 17% yield.
REFERENCE COUNT:
                         6
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
TΤ
    Brain, disease
      Heart, disease
     Intestine, disease
     Kidney, disease
     Liver, disease
     Lung, disease
     Muscle, disease
     Pancreas, disease
     Spleen
        (ischemia; prepn. of diazole and triazole guanidine derivs.
        as NHE-1 inhibitors for treatment of ischemia)
TΨ
     Ischemia
        (prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors
        for treatment of ischemia)
TT
     9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (pharmaceuticals also contg. inhibitors of; prepn. of diazole
        and triazole guanidine derivs. as NHE-1 inhibitors for
        treatment of ischemia)
     110703-94-1, 3,4-Dihydro-4-oxo-3-[[5-(trifluoromethyl)-2-
TΤ
     benzothiazolyl]methyl]-1-phthalazineacetic acid
                                                       186392-40-5
                             186392-53-0
     186392-43-8 186392-49-4
                                           186392-64-3
                   186429-64-1
     186392-65-4
                                 186429-78-7
                                               186429-91-4
                                                             186430-03-5
     186430-23-9
                   186430-41-1
                                 186430-57-9
                                               186431-27-6
                                                             225929-30-6
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pharmaceuticals contg.; prepn. of diazole and triazole guanidine
        derivs. as NHE-1 inhibitors for treatment of ischemia)
L35 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1999:354425 HCAPLUS
DOCUMENT NUMBER:
                         131:9635
                         Combination of an aldose reductase inhibitor and a
TITLE:
                         glycogen phosphorylase inhibitor
INVENTOR(S):
                         Mylari, Banavara Lakshman; Hoover, Dennis Jay; Hulin,
```

Bernard; Treadway, Judith Lee

Pfizer Products Inc., USA

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
KIND DATE
                                      APPLICATION NO. DATE
    PATENT NO.
                    ----
    ------
                                        -----
                                   WO 1998-IB1752
    WO 9926659
                          19990603
                    A1
                                                         19981102
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2310069
                          19990603
                                        CA 1998-2310069 19981102
                     AA
                                        AU 1998-95558
    AU 9895558
                     Α1
                          19990615
                                                         19981102
                     B2
    AU 733304
                          20010510
    EP 1032424
                     Α1
                          20000906
                                        EP 1998-949193
                                                         19981102
    EP 1032424
                     В1
                          20010912
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    BR 9814698
                    Α
                          20001003
                                        BR 1998-14698
                                                         19981102
    AT 205403
                     E
                          20010915
                                        AT 1998-949193
                                                         19981102
    ES 2161548
                     Т3
                          20011201
                                        ES 1998-949193
                                                         19981102
    JP 2002504478
                     T2
                          20020212
                                        JP 2000-521860
                                                         19981102
    ZA 9810636
                    Α
                          20000522
                                        ZA 1998-10636
                                                         19981120
    NO 2000002164
                    Α
                          20000719
                                        NO 2000-2164
                                                         20000427
PRIORITY APPLN. INFO.:
                                     US 1997-66365P
                                                      P 19971121
                                      WO 1998-IB1752
                                                      W 19981102
```

Pharmaceutical compns., kits and methods comprising combination of aldose AB reductase inhibitors (0.1-20 mg/kg) and glycogen phosphorylase inhibitors (0.1-15 mg/kg), useful for treatment of insulin resistant conditions such as diabetes, hyperglycemia, hypercholesterolemia, hypertension, hyperinsulinemia, hyperlipidemia, atherosclerosis, and tissue ischemia, etc., are described. E.g., a tablet formulation contained an active ingredient (an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, or a combination of the two) 0.25-100, starch 45, microcryst. cellulose 35, PVP (as 10% soln. in water) 4, Na CM-cellulose 4.5, Mg stearate 0.5, and talc 1 mg/tablet, resp.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Acromegaly

Anti-infective agents Anti-ischemic agents Anticholesteremic agents Antidiabetic agents Antihypertensives Antiobesity agents Brain, disease Cardiovascular agents Drug delivery systems

3

Heart, disease Hypolipemic agents Kidney, disease Liver, disease Lung, disease Muscle, disease

Pancreas, disease Pregnancy

Spleen, disease

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

Diabetes mellitus TΤ

> (non-insulin-dependent; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

TΤ Heart

> (surgery; compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

186392-40-5 110703-94-1 186392-43-8 186392-49-4 IT 186392-53-0 186392-64-3 186429-64-1 186429-78-7 186430-11-5 186430-23-9 186430-41-1 186430-52-4 186431-27-6 208830-24-4 225929-30-6 208830-25-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans) 9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans)

L35 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER:

1998:388320 HCAPLUS

DOCUMENT NUMBER:

129:72196

TITLE:

TΤ

Use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia

INVENTOR (S):

Hoover, Dennis J.; Martin, William Holt; Tracey, Wayne

Ross; Treadway, Judith Lee

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Inc., USA

Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.			KIND DAT			ATE A			PLIC	CATI	ON N	ю.	DATE			
EP	8464	64	-	 A:	2	- 1998:	0610		EF	199	97-3	 0972	. – – !7	1997	1203		
	8464			A:		1999	-										
	R:			-		•	-	FR,	GB,	GR,	IT,	LI,	LU	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO										•
US	5952	322		Α		1999	0914		US	199	97-9	7838	4	1997	1125		
CA	2223	317		A	4	1998	0605		CA	199	97-2	2233	17	1997	1203		
JP	1019	4990		A:	2	1998	0728		JF	199	97-3	3252	:3	1997	1203		
JP	3277	147		B:	2 :	2002	0422										
AU	9746	869		A.	L :	1998	0611		ΑU	199	97-4	6869)	1997	1204		
ΑŬ	7175	47		B:	2	2000	0330										
ZA	9710	907		Α		1999	0604		ZA	199	97-1	0907	,	1997	1204		
PRIORIT	Y APP	LN.	INFO	. :				τ	JS 19	96-3	3158	4 P	P	1996	1205		
OTHER S	OURCE	(S):			MAR	PAT	129:	72196	5				,		•		
AB The	e use	of a	a gly							bito	or f	or t	he r	nanuf	. of	a	

medicament for reducing non-cardiac tissue damage resulting from ischemia or hypoxia. The tissue is brain, liver, kidney, lung, gut, skeletal muscle, spleen, pancreas, nerve, spinal code, retina tissue, the vasculature or intestinal tissue. Said glycogen phosphorylase inhibitor is represented by a compd. of formula [I; A = C(X): (wherein X = H, C1-4)]alkyl, halo) when the dotted line is a bond; A = CH2 or CH(C1-4 alkyl) when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6-, or 7-NO2, cyano, C1-4 alkyl or alkoxy, CH2F, CF2H, CF3; R2 = H; R3 = H, C1-5 alkyl; R4 = H, Me, Et, n-Pr, C1-3 hydroxyalkyl, C1-3 alkoxy-C1-3 alkyl, phenyl-C1-4 alkyl, thien-2- or -3-yl-C1-4 alkyl, furan-2- or -3-yl-C1-4 alkyl, etc.; R5 = H, OH, F, C1-5 alkyl or alkoxy, C1-6 alkanoyl, amino-C1-4 alkoxy, mono-N- or di-N, N-C1-4 alkyl amino-C1-4 alkoxy, carboxy-C1-4 alkoxy, etc.; R7 = H, F, C1-5 alkyl; or R5 and R7 are taken together to form oxo; R6 = CO2H, C1-8 alkoxycarbonyl, (un)substituted CONH2, COR12; wherein R12 = piperazin-1-yl, 4-(C1-4 alkyl)piperazin-1-yl, 4-formylpiperazin-1-yl, morpholino, thiomorpholino, 1-oxothiomorpholino, 1,1-dioxothiomorpholino, thizolidin-3-yl, etc.], e.g. indolecarboxamide (II) which inhibited human liver glycogen phosphorylase a (HLGPa) and human muscle glycogen phosphorylase a (HMGPa) with IC50 of 45 and 85 nM, resp.

IT Blood vessel, disease

Brain, disease
Intestine, disease
Intestine, disease
Intestine, disease
Kidney, disease
Liver, disease
Lung, disease
Nerve, disease
Pancreas, disease
Pancreas, disease

(injury; use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from **ischemia** or hypoxia)

IT Animal tissue

Spinal cord

Digestive tract

Hypoxia, animal

Ischemia

Spleen

(Uses)

TT

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

186392-40-5 186392-43-8 186392-46-1 **186392-49-4**186392-53-0 186392-64-3 186429-66-3 186430-04-6 186430-23-9
186430-40-0 186431-27-6 186431-28-7 208830-24-4 208830-25-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

TT 186392-40-5 186392-43-8 186392-46-1 **186392-49-4** 186392-53-0 186392-64-3 186429-66-3 186430-04-6 186430-23-9 186430-40-0 186431-27-6 186431-28-7 208830-24-4 208830-25-5 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 12:07:02 ON 05 SEP 2002

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Aug 30, 2002 (20020830/UP).

=> D QU	E L36	
L1	6031	SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
		PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
L2	465	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
L3	153	SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT
	·	OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR
		PKT OR DMA)/RL
L4	47128	SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT
		OR DIABETES MELLITUS+NT, PFT/CT
L5	304	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC
		CARDIOMYOPATHY"+PFT/CT
L6	287453	SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT, PFT/C
		T
L7	20270	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP
		ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
		OR ISCHEMIA+NT, PFT/CT
L8	9348	SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
		"REPERFUSION (L) INJURY"+PFT/CT
L9		SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6
		OR L7 OR L8)
L14	1	OR L7 OR L8) SEA FILE=REGISTRY ABB=ON PLU=ON 186392-65-4/RN d1 2, 5th compound SEA FILE=HCAPLUS ABB=ON PLU=ON 1.14
L21		
L28		SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L21
L31	2	SEA FILE=HCAPLUS ABB=ON PLU=ON WO199639384/PN OR WO199639385/
T 2 6	•	PN
L36	. 9	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 NOT L31

=> FIL REG

D OTTE TO

FILE 'REGISTRY' ENTERED AT 12:07:15 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L14

L14 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-65-4 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5-chloro-N-[3-(3,4-dihydroxy-1-pyrrolidinyl)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]-, [R-[R*,S*-(cis)]]-

OTHER NAMES:

CN Ingliforib

FS STEREOSEARCH

MF C23 H24 Cl N3 O5

SR . CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 11 REFERENCES IN FILE CA (1967 TO DATE)
- 11 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:07:32 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use

the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L36 1-9

L36 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:936092 HCAPLUS

DOCUMENT NUMBER: 136:53752

TITLE: Synthesis and use of mono-, di- and triethanolamine

salts of zopolrestat alone and in combination with

(e.g.) NHE-1 inhibitors

INVENTOR(S): Mylari, Banavara L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 41 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2001056095 A1 20011227 US 2001-782798 20010213

PRIORITY APPLN. INFO.: US 2000-183004P P 20000216

AB Mono-, di- and triethanolamine salts of [4-Oxo-(5-trifluoromethylbenzothiazol-2-ylmethyl)-3,4-dihydrophthalazin-1-yl]acetic acid (zopolrestat; I) were prepd. E.g., a soln. of I in acetone was added to ethanolamine (10 mol equiv, room temp., 1 h) which afforded, after purifn., the ethanolamine salt in 95% yield, m.p. 119 - 121.degree.C. Ethanolamine salts of I are used alone or with NHE-1 inhibitors (e.g. II), selective serotonin reuptake inhibitors (SSRIs, e.g. fluoxetine), glycogen phosphorylase inhibitors (GPIs), sorbitol dehydrogenase inhibitors (SDIs) and antihypertensive agents for treating diabetic complications.

IT Diabetes insipidus

(complications from)

IT Heart, disease

(diabetic cardiomyopathy; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)

IT Heart, disease

(infarction; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)

IT Blood vessel, disease

(microangiopathy; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)

79559-97-0, Sertraline hydrochloride IT 54910-89-3, Fluoxetine 79617-96-2, Sertraline 106650-56-0, Sibutramine 186392-65-4 241801-81-0, [5-Isopropyl-1-(6-quinolinyl)-1H-pyrazole-4carbonyl]guanidine 241801-83-2, [5-Propyl-1-(6-quinolinyl)-1H-pyrazole-4carbonyl]guanidine 241801-85-4, [1-(2-Chlorophenyl)-5-methyl-1H-pyrazole-4-carbonyl] quanidine 241801-86-5, [5-Methyl-1-(2-trifluoromethylphenyl)-1H-pyrazole-4-carbonyl]guanidine 241801-87-6, (5-Ethyl-1-phenyl-1Hpyrazole-4-carbonyl)guanidine 241801-88-7, [5-Cyclopropyl-1-(2trifluoromethylphenyl)-1H-pyrazole-4-carbonyl]guanidine 241801-89-8, (5-Cyclopropyl-1-phenyl-1H-pyrazole-4-carbonyl)quanidine 241801-90-1, [5-Cyclopropyl-1-(2,6-dichlorophenyl)-1H-pyrazole-4-carbonyl]quanidine 241801-93-4, [5-Cyclopropyl-1-(quinolin-8-yl)-1H-pyrazole-4carbonyl]guanidine 241802-04-0, [1-(2-Chloro-4-methylsulfonylphenyl)-5cyclopropyl-1H-pyrazole-4-carbonyl]guanidine 241802-05-1, [1-(2-Chlorophenyl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]guanidine

```
241802-06-2, [1-(2-Trifluoromethyl-4-fluorophenyl)-5-cyclopropyl-1H-
pyrazole-4-carbonyl]guanidine 241802-07-3, [1-(2-Bromophenyl)-5-
cyclopropyl-1H-pyrazole-4-carbonyl]guanidine
                                              241802-08-4,
[1-(2-Fluorophenyl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]quanidine
241802-09-5, [1-(2-Chloro-5-methoxyphenyl)-5-cyclopropyl-1H-pyrazole-4-
carbonyl]quanidine
                    241802-10-8, [1-(2-Chloro-4-
methylaminosulfonylphenyl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]guanidine
241802-11-9, [1-(2,5-Dichlorophenyl)-5-cyclopropyl-1H-pyrazole-4-
                    241802-12-0, [1-(2,3-Dichlorophenyl)-5-cyclopropyl-1H-
carbonyl]guanidine
pyrazole-4-carbonyl]guanidine
                               241802-13-1, [1-(2-Chloro-5-
aminocarbonylphenyl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]guanidine
241802-14-2, [1-(2-Chloro-5-aminosulfonylphenyl)-5-cyclopropyl-1H-pyrazole-
4-carbonyl]guanidine
                      241802-15-3, [1-(2-Fluoro-6-trifluoromethylphenyl)-
5-cyclopropyl-1H-pyrazole-4-carbonyl]guanidine 241802-16-4,
[1-(2-Chloro-5-methylsulfonylphenyl)-5-cyclopropyl-1H-pyrazole-4-
carbonyl]guanidine
                   241802-17-5, [1-(2-Chloro-5-
dimethylaminosulfonylphenyl)-5-cyclopropyl-1H-pyrazole-4-
carbonyl]quanidine 241802-18-6, [1-(2-Trifluoromethyl-4-chlorophenyl)-5-
cyclopropyl-1H-pyrazole-4-carbonyl]quanidine
                                              241802-19-7,
[1-(8-Bromoquinolin-5-yl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]quanidine
241802-20-0, [1-(6-Chloroquinolin-5-yl)-5-cyclopropyl-1H-pyrazole-4-
carbonyl]guanidine
                    241802-21-1, [1-(Indazol-7-yl)-5-cyclopropyl-1H-
pyrazole-4-carbonyl]guanidine
                              241802-22-2, [1-(Benzimidazol-5-yl)-5-
cyclopropyl-1H-pyrazole-4-carbonyl]guanidine
                                              241802-23-3,
[1-(1-Isoquinolyl)-5-cyclopropyl-1H-pyrazole-4-carbonyl]guanidine
241802-24-4, [5-Cyclopropyl-1-(4-quinolinyl)-1H-pyrazole-4-
                    241802-25-5, [1-(Indazol-6-yl)-5-ethyl-1H-pyrazole-4-
carbonyl]guanidine
carbonyl]quanidine
                    241802-26-6, [1-(Indazol-5-yl)-5-ethyl-1H-pyrazole-4-
carbonyl]guanidine
                    241802-27-7, [1-(Benzimidazol-5-yl)-5-ethyl-1H-
pyrazole-4-carbonyl]guanidine
                              241802-28-8, [1-(1-Methylbenzimidazol-6-
yl) -5-ethyl-1H-pyrazole-4-carbonyl] guanidine
                                              241802-29-9,
[1-(5-Quinolinyl)-5-n-propyl-1H-pyrazole-4-carbonyl]guanidine
241802-30-2, [1-(5-Quinolinyl)-5-isopropyl-1H-pyrazole-4-
carbonyl]guanidine
                    241802-31-3, [5-Ethyl-1-(6-quinolinyl)-1H-pyrazole-4-
carbonyl]guanidine
                    241802-32-4, [1-(2-Methylbenzimidazol-5-yl)-5-ethyl-
1H-pyrazole-4-carbonyl]guanidine 241802-33-5, [1-(1,4-Benzodioxan-6-yl)-
                                         241802-34-6,
5-ethyl-1H-pyrazole-4-carbonyl]guanidine
[1-(Benzotriazol-5-yl)-5-ethyl-1H-pyrazole-4-carbonyl]guanidine
241802-35-7, [1-(3-Chloroindazol-5-yl)-5-ethyl-1H-pyrazole-4-
                    241802-36-8, [1-(5-Quinolinyl)-5-butyl-1H-pyrazole-4-
carbonyl]guanidine
                    300548-76-9, 1(R)-[4-[1'-[2-(1(R)-
carbonyl]guanidine
Hydroxyethyl)pyrimidin-4-yl]-[4,4']bipiperidinyl-1-yl]pyrimidin-2-
            300548-89-4
                         300548-90-7
                                       300548-92-9, 1R-[4-[4-(2-
yl]ethanol
Hydroxymethyl-6-methylpyrimidin-4-yl)-3S-methylpiperazin-1-yl]pyrimidin-2-
            300548-93-0 300548-99-6 300549-00-2, 1R-[4-[4-(4,6-
yl]ethanol
Dimethylpyrimidin-2-yl)-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-
yl]ethanol 300549-02-4, 1R-[4-[4-(4-Hydroxymethyl-6-methylpyrimidin-2-
yl)-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol 300549-03-5,
1R-[4-[4-(2,6-Dimethylpyrimidin-4-yl)-2R,6S-dimethylpiperazin-1-
yl]pyrimidin-2-yl]ethanol 300549-05-7, 1R-[4-[4-(2-Hydroxymethyl-6-
methylpyrimidin-4-yl)-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300549-16-0, 1R-[4-[4-(2-Hydroxymethylpyrimidin-4-yl)-3S-methylpiperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300549-28-4
                                          300549-30-8 / 300549-32-0
300549-34-2
             300549-50-2
                           300549-51-3
                                         300549-53-5
                                                        300549-58-0,
1R-[4-[4-(4-Hydroxymethyl-6-methylpyrimidin-2-yl)-3S-methylpiperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300550-38-3 300550-60-1
                                                       300550-69-0
300551-01-3, 1R-[4-[2R,6S-Dimethyl-4-[2-(4-methylimidazol-1-yl)pyrimidin-4-
yl]piperazin-1-yl]pyrimidin-2-yl]ethanol
                                          300551-03-5,
1R-[4-[4-[2-(2,4-Dimethylimidazol-1-yl)pyrimidin-4-yl]-2R,6S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                              300551-04-6 300551-11-5,
```

```
1R-[4-[2R,6S-Dimethyl-4-[2-(4-methylpiperazin-1-yl)pyrimidin-4-
yl]piperazin-1-yl]pyrimidin-2-yl]ethanol 300551-12-6,
1R-[4-[2R,6S-Dimethyl-4-(2-morpholin-4-ylpyrimidin-4-yl)piperazin-1-
                           300551-17-1, 1R-[4-[3R,5S-Dimethyl-4-[2-(4-
yl]pyrimidin-2-yl]ethanol
methylpiperazin-1-yl)pyrimidin-4-yl]piperazin-1-yl]pyrimidin-2-yl]ethanol
300551-19-3, 1R-[4-[4-[2-(4-Ethylpiperazin-1-yl)pyrimidin-4-yl]-3R,5S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                               300551-20-6,
1R-[4-[4-[2-(4-Isopropylpiperazin-1-yl)pyrimidin-4-yl]-3R,5S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                              300551-21-7,
1R-[4-[2R,6S-Dimethyl-4-(4-morpholin-4-yl-[1,3,5]triazin-2-yl)piperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300551-22-8, 1R-[4-[4-(4-Methoxy-6-methyl-
[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300551-23-9, 1R-[4-[4-(4,6-Dimethoxy-[1,3,5]triazin-2-yl)-3R,5S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                               300551-24-0,
1R-[4-[2R,6S-Dimethyl-4-(4-phenyl-[1,3,5]triazin-2-yl)piperazin-1-
yl]pyrimidin-2-yl]ethanol 300551-28-4, 1R-[4-[3R,5S-Dimethyl-4-[4-methyl-
6-(4-methylpiperazin-1-yl)-[1,3,5]triazin-2-yl]piperazin-1-yl]pyrimidin-2-
            300551-29-5, 1R-[4-[2R,6S-Dimethyl-4-(4-methyl-[1,3,5]triazin-
yl]ethanol
2-yl)piperazin-1-yl]pyrimidin-2-yl]ethanol
                                            300551-30-8,
1R-[4-[4-(4,6-Dimethoxy-[1,3,5]triazin-2-yl)-2R,6S-dimethylpiperazin-1-
yl]pyrimidin-2-yl]ethanol
                          300551-31-9, 1R-[4-[4-(4-Ethoxy-6-methyl-
[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300551-32-0, 1R-[4-[4-(4-Isopropoxy-6-methyl-[1,3,5]triazin-2-yl)-3R,5S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                               300551-33-1,
1R-[4-[3R,5S-Dimethyl-4-(4-phenyl-[1,3,5]triazin-2-yl)piperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300551-42-2, 1R-[4-[4-(4-Cyclopropyl-
[1,3,5]triazin-2-yl)-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
             300551-45-5, 1R-[4-[4-(4-Hydroxymethyl-6-methoxy-
[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300551-48-8, 1R-[4-[4-(4-Hydroxymethyl-6-phenyl-[1,3,5]triazin-2-yl)-2R,6S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
                                               300551-49-9,
1R-[4-[4-(4,6-Dimethyl-[1,3,5]triazin-2-yl)-2R,6S-dimethylpiperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300551-50-2, 1R-[4-[4-(4,6-Dimethyl-
[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300551-52-4, 1R-[4-[3R,5S-Dimethyl-4-(4-methyl-6-phenyl-[1,3,5]triazin-2-
yl)piperazin-1-yl]pyrimidin-2-yl]ethanol
                                         300551-87-5
                                                        300551-88-6
                            300551-91-1
                                          300551-92-2
300551-89-7
             300551-90-0
                                                       300551-94-4
             300551-96-6, 1R-[4-[3R,5S-Dimethyl-4-[2-(4-methylimidazol-1-
300551-95-5
yl)pyrimidin-4-yl]piperazin-1-yl]pyrimidin-2-yl]ethanol 300551-97-7,
1R-[4-[3R,5S-Dimethyl-4-[2-(2-methylimidazol-1-yl)pyrimidin-4-yl]piperazin-
1-yl]pyrimidin-2-yl]ethanol
                             300551-98-8, 1R-[4-[4-[2-(2,4-
Dimethylimidazol-1-yl)pyrimidin-4-yl]-3R,5S-dimethylpiperazin-1-
yl]pyrimidin-2-yl]ethanol
                           300551-99-9, 1R-[4-[4-(4-Isopropoxy-6-methoxy-
[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300552-00-5, 1R-[4-[4-(4-Isopropyl-[1,3,5]triazin-2-yl)-3R,5S-
dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol 300552-02-7,
1R-[4-[4-(4-Ethyl-6-methoxy-[1,3,5]triazin-2-yl)-3R,5S-dimethylpiperazin-1-
yl]pyrimidin-2-yl]ethanol 300552-03-8, 1R-[4-[4-[4-[4-Ethylpiperazin-1-
yl)pyrimidin-4-yl]-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol
300552-04-9, 1R-[4-[4-(4-Methoxy-6-methoxymethyl-[1,3,5]triazin-2-yl)-
2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol 300552-06-1,
1R-[4-[4-(4-Methoxy-6-methyl-[1,3,5]triazin-2-yl)-2R,6S-dimethylpiperazin-2-yl)
                            300552-07-2
1-yl]pyrimidin-2-yl]ethanol
                                            382142-96-3
                                                          382143-00-2
382143-43-3
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (combination pharmaceutical; synthesis and use of mono-, di- and
   triethanolamine salts of zopolrestat alone and in combination with
   (e.g.) NHE-1 inhibitors)
```

```
L36 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709687 HCAPLUS
```

DOCUMENT NUMBER: 135:272869

TITLE: Synthesis of indolyl-amides as glycogen phosphorylase

inhibitors for treatment of type 2 diabetes

INVENTOR(S): Treadway, Judith Lee
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 78 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

IE, SI, LT, LV, FI, RO
JP 2001302546 A2 20011031 JP 2001-78839 20010319
PRIORITY APPLN. INFO.: US 2000-191381P P 20000322

OTHER SOURCE(S): MARPAT 135:272869

Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepd. Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temp.) to give amide II. I are glycogen phosphorylase inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

IT Diabetes mellitus

(non-insulin-dependent; synthesis of indolyl-amides as glycogen
phosphorylase inhibitors for treatment of type 2 diabetes)

```
TΤ
     186392-40-5P
                    186392-46-1P
                                   186392-47-2P
                                                  186392-49-4P
                                                                  186392-51-8P
                                   186392-64-3P 186392-65-4P
     186392-52-9P
                    186392-53-0P
                                                  186430-03-5P
     186392-70-1P
                    186429-64-1P
                                   186429-91-4P
                                                                  186430-23-9P
                                                  186431-28-7P
     186430-41-1P
                    186430-83-1P
                                   186431-27-6P
                                                                  186431-29-8P
                                                  251446-22-7P
                    251446-20-5P
     225929-30-6P
                                   251446-21-6P
                                                                  251446-23-8P
                                                  251446-27-2P
                    251446-25-0P
                                   251446-26-1P
     251446-24-9P
                                                                  251446-28-3P
                    251446-30-7P
     251446-29-4P
                                                  251446-32-9P
                                   251446-31-8P
                                                                  251446-33-0P
                    251446-35-2P
                                                  332098-12-1P
                                   332098-11-0P
                                                                  332098-13-2P
     251446-34-1P
                                                  332098-17-6P
                                                                  332098-18-7P
     332098-14-3P
                    332098-15-4P
                                   332098-16-5P
                    332098-20-1P
                                                  332098-22-3P
     332098-19-8P
                                   332098-21-2P
                                                                  332098-23-4P
                                                  332098-27-8P
     332098-24-5P
                    332098-25-6P
                                   332098-26-7P
                                                                  332098-28-9P
                    332098-30-3P
                                                  332098-32-5P
                                                                  332098-33-6P
     332098-29-0P
                                   332098-31-4P
                                                  332098-37-0P
     332098-34-7P
                    332098-35-8P
                                   332098-36-9P
                                                                  332098-38-1P
                                                  332098-42-7P
                    332098-40-5P
                                   332098-41-6P
     332098-39-2P
                                                                  332098-43-8P
                    332098-45-0P
                                   332098-46-1P
                                                  332098-47-2P
     332098-44-9P
                                                                  332098-48-3P
     332098-49-4P
                    332098-50-7P
                                   332098-52-9P
                                                  332098-54-1P
                                                                  332098-55-2P
     332098-57-4P
                    332098-59-6P
                                   332098-61-0P
                                                   332098-63-2P
                                                                  332098-65-4P
     362521-64-0P
                    362521-65-1P
                                   362521-66-2P
                                                  362521-89-9P
                                                                  362521-91-3P
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

L36 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:693088 HCAPLUS

DOCUMENT NUMBER: 135:262225

TITLE: Glycogen phosphorylase inhibitor compositions

INVENTOR(S):

Babcock, Walter C.; Friesen, Dwayne Thomas; Lorenz,
Douglas Alan; Macri, Christopher A.; Nightingale,
James Alan Schriver; Shanker, Ravi Mysore; Hancock,

Bruno Caspar; Crew, Marshall D.

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
KIND DATE
    PATENT NO.
                                       APPLICATION NO. DATE
    -----
                   ----
                                       ------ -----
    WO 2001068092 A2 20010920
                                      WO 2001-IB389
                                                       20010316
    WO 2001068092
                    A3 20020321
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 2001053791
                     A1
                         20011220
                                        US 2001-808559
PRIORITY APPLN. INFO.:
                                     US 2000-190125P P 20000316
```

AB Pharmaceutical compns. of a particularly effective sparingly sol. glycogen phosphorylase inhibitor are disclosed. Thus, an amorphous solid dispersion contg. 25% a drug and 75% polymer was made by first mixing the drug in acetone together with a finely powd. HPMCAS to form a soln. The soln. comprised 1.25% drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by directing an atomizing spray via a 2-fluid external mix spray nozzle at 2.6 bar at a 175 to 180 g/min feed rate into a stainless steel chamber of a NIRO XP spray drier, maintained at a temp. of 180.degree. at the inlet and 69.degree. at the outlet.

IT 186392-65-4

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (glycogen phosphorylase inhibitor compns.)

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitor; glycogen phosphorylase inhibitor
 compns.)

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitor; glycogen phosphorylase inhibitor
 compns.)

L36 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2002 ACS

```
2001:693054 HCAPLUS
ACCESSION NUMBER:
                        135:247221
DOCUMENT NUMBER:
                        Pharmaceutical compositions containing glycogen
TITLE:
                        phosphorylase inhibitors
                        Hoover, Dennis Jay; Shanker, Ravi Mysore; Friesen,
INVENTOR(S):
                        Dwayne Thomas; Lorenz, Douglas Alan; Nightingale,
                        James Alan Schriver
                        Pfizer Products Inc., USA
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 142 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                        1
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                     APPLICATION NO. DATE
                                         -----
     -----
                           20010920 WO 2001-IB394 20010316
    WO 2001068055
                    A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         US 2001-805828 20010314
     US 2001053778
                     A1
                           20011220
                                       US 2000-189942P P 20000316
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                        MARPAT 135:247221
    Pharmaceutical compns. comprise a glycogen phosphorylase inhibitor and at
     least one concn.-enhancing polymer. The compn. may be a simple phys.
    mixt. of glycogen phosphorylase inhibitor and concn.-enhancing polymer or
     a dispersion of glycogen phosphorylase inhibitor and polymer. A
     dispersion of 25% 5-chloro-lH-indole-2-carboxylic acid
     [(1S)-benzyl-(2R)-hydroxy-3-((3R,4S)-dihydroxypyrrolidin-1-yl)-3-
     oxypropyl]amide and 75% polymer was made by first mixing the drug in
     acetone together with HPMCAS to form a soln. The soln. comprised 1.25
     drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by
     directing an atomizing spray using a 2-fluid external-mix spray nozzle at
     2.6 bar at a feed rate of 175 to 180 g/min into the stainless-steel
     chamber of a spray-dryer, maintained at 180.degree. on the inlet and
     69.degree. at the outlet. The resulting amorphous solid spray-dried
     dispersion was collected and then dried in a solvent tray-dryer by
     spreading the spray-dried particles onto polyethylene-lined trays to a
     depth of not >1 cm and then drying them at 40.degree. for at least 8 h.
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        4
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
IT
     Heart, disease
        (diabetic cardiomyopathy; pharmaceutical compns.
        contg. glycogen phosphorylase inhibitors)
IT
     Heart, disease
        (ischemia; pharmaceutical compns. contg. glycogen
       phosphorylase inhibitors)
IT
     Diabetes mellitus
        (non-insulin-dependent; pharmaceutical compns. contg. glycogen
        phosphorylase inhibitors)
IT
     Antitumor agents
     Atherosclerosis
     Cataract
```

```
Digestive tract
Dissolution rate
Drug bioavailability
Hypercholesterolemia
Hyperglycemia
Hypertension
Hypertriglyceridemia
Ischemia
Solubility
Solvent effect
```

(pharmaceutical compns. contg. glycogen phosphorylase inhibitors)

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(inhibitors; pharmaceutical compns. contg. glycogen

phosphorylase inhibitors)

 IT
 186392-40-5
 186392-43-8
 186392-51-8
 186392-53-0
 186392-63-2

 186392-65-4
 186429-91-4
 186430-03-5
 186430-23-9

 186430-40-0
 186430-57-9
 186431-27-6
 251446-20-5
 251446-21-6

251446-32-9 332098-16-5 332098-17-6 361176-31-0

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pharmaceutical compns. contg. glycogen phosphorylase inhibitors)

L36 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:554794 HCAPLUS

DOCUMENT NUMBER:

135:132447

TITLE:

Chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for

treatment of diabetic cardiomyopathy

INVENTOR(S):

Treadway, Judith Lee

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

SOURCE:

Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	JP 2001206856	A2 20010731	JP 2001-14036	20010123
			EP 2001-300575	
			R, GB, GR, IT, LI, LU	
		LT, LV, FI, RO		
	US 2001046958	A1 20011129	US 2001-767633	20010123
PRIO	RITY APPLN. INFO	.:	US 2000-177770P P	20000124
AB	Chloroindolepher	nylethylamide analo	gs, including 5-chlo	ro-1H-indole-2-
	carboxylic acid	[(1S) - ((R) - hydroxy)]	dimethylcarbamoylmet	hyl)-2-
			prodrugs are claime	
			ment of diabetic car	
	title compds. ca	an also combine wit	h insulin, insulin a	nalogs (biguanides),
	.alpha.2-antago	nists, imidazolines	s, glitazone derivs.,	PPAR.gamma.
			tors, .alphaglucos	
			inhibitors, hypolip	
	agents, vanadiu	m salts, glucagon a	intagonists, somatost	atin analogs, aldose
	reductase inhib	itors, sorbitol deb	ydrogenase inhibitor	s, glucocorticoid
	receptor antago	nists, and/or thyro	oid hormone analogs f	or treatment of
	diabetes, cardio	ovascular diseases,	heart ischemia, con	gestive heart
	failure, hyperte	ension, diabetic an	giopathy, myocardial	infarction, etc.

Blood vessel, disease ΤТ

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

TT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

Cardiovascular system IT

> (disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

> (failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs. 7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin, 97322-87-7D, TroGlitazone, derivs. 186392-21-2 biological studies 186392-49-4 **186392-65-4** 186392-39-2 186392-40-5 186392-67-6 186392-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

9035-74-9, Glycogen phosphorylase IT

> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

L36 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:489208 HCAPLUS

DOCUMENT NUMBER:

135:97443

TITLE:

Pharmaceutical compositions containing polymer for

enhanced drug concentrations

INVENTOR(S):

Babcock, Walter Christian; Curatolo, William John;

Friesen, Dwayne Thomas; Lorenz, Douglas Alan;

Nightingale, James Alan Schriver; Shanker, Ravi Mysore

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA PCT Int. Appl., 85 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
     _____
                      ----
                                            -----
                     A1 20010705
     WO 2001047495
                                      WO 2000-IB1787 20001201
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A1 20020117
                                           US 2000-742785 20001220
     US 2002006443
                                         US 1999-171841P P 19991223
PRIORITY APPLN. INFO.:
    A drug in a soly.-improved form is combined with a concn.-enhancing
    polymer, i.e., a cellulosic or non-cellulosic polymer, in a sufficient
     amt. so that the combination provides substantially enhanced drug concn.
     in a use environment,, such as digestive tract, s.c. space, vagina, lung,
    blood vessels, and muscle relative to a control comprising the same amt.
    of the same soly.-improved form of drug without the concn.-enhancing
    polymer. For example, the soly. of sertraline-HCl was increased in
    presence of citric acid, giving a soly.-improvement factor of 9.3. Thus,
    citric acid is an excellent solubilizing agent for sertraline-HCl. A
     soln. was prepd. contg. 1000 .mu.g/mL sertraline-HCl, 500 .mu.g/mL citric
    acid, and 1000 .mu.g/mL hydroxypropyl Me cellulose acetate succinate
     (HPMCAS) in phosphate buffer. (pH 7.9). Addn. of the concn.-enhancing
    polymer HPMCAS resulted in a max. concn. that was 1.7-fold that of control
     contg. no polymer.
```

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Artery

Crystallization Digestive tract Dissolution rate Drug delivery systems Lung Muscle Polyelectrolytes Solubility Solubilization Solubilizers Vagina

(pharmaceutical compns. contg. polymer for enhanced drug concns.) IT 9004-38-0, Cellulose acetate phthalate 9004-58-4, Hydroxyethyl ethyl 9004-63-1, Hydroxyethyl cellulose acetate 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9032-42-2, Hydroxyethyl methyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 52907-01-4, Cellulose acetate trimellitate 54391-89-8, Cellulose acetate terephthalate 58858-21-2, Hydroxypropyl methyl cellulose acetate 67165-96-2, Hydroxypropyl methyl cellulose acetate phthalate 71138-97-1, Hydroxypropyl methyl cellulose acetate succinate 79559-97-0, Sertraline hydrochloride 89233-51-2, Cellulose propionate phthalate 167077-74-9, Cellulose propionate trimellitate 167077-75-0, Cellulose butyrate trimellitate 185021-64-1, Ziprasidone mesylate 186392-65-4 188979-58-0 219736-80-8 248594-19-6 249296-43-3 288141-80-0, Methyl cellulose acetate phthalate 288156-14-9, Hydroxypropyl methyl cellulose acetate trimellitate 288307-50-6, Hydroxypropyl cellulose butyrate phthalate 288307-51-7, Cellulose acetate isophthalate

288372-70-3,
Hydroxypropyl cellulose acetate phthalate succinate 288372-71-4, Methyl cellulose acetate trimellitate 288372-72-5, Ethyl cellulose acetate trimellitate 288372-72-5, Ethyl cellulose acetate trimellitate 288372-73-6, Hydroxypropyl cellulose acetate trimellitate 288372-74-7, Hydroxypropyl cellulose acetate trimellitate succinate 288372-75-8, Cellulose acetate pyridinedicarboxylate 288372-76-9 288372-77-0 288372-80-5, Ethyl nicotinic acid cellulose acetate 288372-81-6, Ethyl picolinic acid cellulose acetate 348078-72-8 348078-73-9
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pharmaceutical compns. contg. polymer for enhanced drug concns.)

L36 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:573515 HCAPLUS

DOCUMENT NUMBER: 133:182970

TITLE: Matrix controlled release device for a low-solubility

drug

INVENTOR(S): Appel, Leah Elizabeth; Friesen, Dwayne Thomas;

Curatolo, William John; Nightingale, James Alan

Schriver; Thombre, Avinash Govind

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1027887	A2	20000816	EP 2000-300546	20000126
EP 1027887	A3	20010228		
R: AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IT, LI, I	U, NL, SE, MC, PT,
IE, SI,	LT, LV,	FI, RO		
JP 2000229888	A2	20000822	JP 2000-33446	20000210
BR 200000359	A	20010814	BR 2000-359	20000210
PRIORITY APPLN. INFO	. :		US 1999-119400P F	19990210

- Disclosed are a controlled release dosage form for a low soly. drug that is a spray-dried or spray-coated amorphous solid dispersion of the drug in an ionizable cellulosic polymer matrix that is in turn incorporated into a secondary erodible polymeric matrix and a method of treating a disease or disorder comprising administering such a dosage form. A batch of solid dispersion was prepd. by spray-drying a soln. contg. drug 5-chloro-1H-indole-2-carboxylic acid [(1S-benzyl-3-(3R,4S)-dihydroxypyrrolidin-1-yl)-(2R)-hydroxy-3-oxypropyl]amide (water soly. 80 .mu.g/mL) in acetone together with hydroxypropyl Me cellulose acetate succinate. The resulting solid dispersion was mixed with hydroxypropyl Me cellulose, lactose, and Mg stearate. The mixt. was finally compressed to give tablets.
- IT 67-52-7D, 2,4,6(1H,3H,5H)-Pyrimidinetrione, derivs. 9003-01-4, Polyacrylic acid 9004-38-0, Cellulose acetate phthalate 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9032-42-2, Hydroxyethyl methyl cellulose 9032-50-2, Methyl cellulose phthalate 19216-56-9, Prazosin 21829-25-4, Nifedipine 25086-15-1, Methacrylic acid-methyl methacrylate copolymer 25087-26-7, Polymethacrylic acid 25300-64-5, Styrene-maleic acid copolymer 25609-89-6, Crotonic acid-vinyl acetate copolymer 29094-61-9, Glipizide 35795-16-5, Trimazosin 37324-30-4, Hydroxypropyl cellulose phthalate 52907-01-4,

54391-89-8, Cellulose Cellulose acetate trimellitate 53237-50-6 acetate terephthalate 54910-89-3, Fluoxetine 56509-23-0, Sodium cellulose acetate phthalate 67165-96-2, Hydroxypropyl methyl cellulose acetate phthalate 68130-20-1, Starch phthalate 71138-97-1, Hydroxypropyl methyl cellulose acetate succinate 74191-85-8, Doxazosin 76974-66-8, Hydroxypropyl cellulose acetate succinate 79617-96-2, 88527-84-8, Amylose acetate phthalate 89233-51-2, Cellulose Sertraline propionate phthalate 93413-69-5, Venlafaxine 96299-43-3, Styrene-maleic acid-dibutyl phthalate copolymer 96352-13-5, Hydroxypropyl ethyl cellulose phthalate 139755-83-2, Sildenafil 146939-27-7, Ziprasidone 167077-74-9 167077-75-0, Cellulose butyrate 252856-84-1, Poly(vinyl trimellitate 186392-65-4 188979-58-0 acetate hydrogen phthalate) 288141-80-0, Methyl cellulose acetate phthalate 288154-33-6 288156-14-9 288297-68-7 288297-69-8 288307-47-1, Hydroxyethyl methyl cellulose acetate phthalate 288307-48-2, Hydroxyethyl methyl cellulose acetate succinate 288307-50-6, Hydroxypropyl cellulose butyrate phthalate 288307-51-7, Cellulose acetate isophthalate RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cellulosic polymer and pH-sensitive polymer matrixes for solid dispersion of low-soly. drugs) 9001-03-0, Carbonic anhydrase 9035-74-9, Glycogen phosphorylase RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; cellulosic polymer and pH-sensitive polymer matrixes for solid dispersion of low-soly. drugs)

L36 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:566034 HCAPLUS

DOCUMENT NUMBER:

131:199699

TITLE:

TТ

N-[(Substituted five-membered di- or triaza

diunsaturated ring) carbonyl] quanidine derivatives for

the treatment of ischemia

INVENTOR(S):

Hamanaka, Ernest S.; Guzman-Perez, Angel; Ruggeri, Roger B.; Wester, Ronald T.; Mularski, Christian J.

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

PCT Int. Appl., 246 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

Engit

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KI	ND	DATE APPLICATION NO. DATE											
WO	9943	 663	- -	A1 19990902				WO 1999-IB206						19990205			
	W:	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
		KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,
		TR,	TT,	UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,
		TJ,	TM														
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
CA	2321	642		A	A	1999	0902		C.	A 19	99-2	3216	42	1999	0205		
ΑU	9920	706		Α	1	1999	0915		A.	J 19	99-2	0706		1999	0205		
ΑU	7394	03		В	2	2001	1011										
BR	R 9908332			Α		2000	1107		B	R 19	99-83	332		19990205			
ΕP	EP 1056729			A1 20001206				EP 1999-901083 199902					0205				
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	IE,

```
SI, LT, LV, FI, RO
     JP 2002504546
                       T2
                            20020212
                                           JP 2000-533420
                                                            19990205
     ZA 9901578
                       Α
                            20000828
                                           ZA 1999-1578
                                                            19990226
     NO 2000004192
                      Α
                            20000822
                                           NO 2000-4192
                                                            20000822
                                        US 1998-76362P
                                                         Р
PRIORITY APPLN. INFO.:
                                                            19980227
                                                         W 19990205
                                        WO 1999-IB206
                         MARPAT 131:199699
OTHER SOURCE(S):
    Guanidine derivs. ZCON:C(NH2)2 [I; Z = certain (un)substituted, diunsatd.,
     diazoles and triazoles] and their pharmaceutically acceptable salts and/or
     prodrugs are disclosed, for use as inhibitors of sodium-hydrogen exchanger
     type 1 (NHE-1). Also disclosed are methods of using I, and pharmaceutical
     compns. contg. them. I are useful for the redn. of tissue damage
     resulting from tissue ischemia (no data). A large no. of compds. I and
     their intermediates were prepd. and/or specifically claimed. For
     instance, guanidine-HCl was converted to the free base, taken up in
     THF-DMF mixt., and coupled with 5-methyl-2-(2-methoxyphenyl)-2H-1,2,3-
     triazole-4-carboxylic acid (pre-activated with carbonyldiimidazole), and
     the resultant guanidine deriv. was isolated and acidified with HCl in
     MeOH, to give title compd. II.HCl in 17% yield.
REFERENCE COUNT:
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                         6
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    Brain, disease
IT
      Heart, disease
     Intestine, disease
     Kidney, disease
     Liver, disease
     Lung, disease
     Muscle, disease
     Pancreas, disease
     Spleen
        (ischemia; prepn. of diazole and triazole guanidine derivs.
        as NHE-1 inhibitors for treatment of ischemia)
IT
     Ischemia
        (prepn. of diazole and triazole guanidine derivs. as NHE-1 inhibitors
        for treatment of ischemia)
     9028-31-3, Aldose reductase 9035-74-9, Glycogen phosphorylase
IT
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (pharmaceuticals also contg. inhibitors of; prepn. of diazole
        and triazole guanidine derivs. as NHE-1 inhibitors for
        treatment of ischemia)
     110703-94-1, 3,4-Dihydro-4-oxo-3-[[5-(trifluoromethyl)-2-
IT
     benzothiazolyl]methyl]-1-phthalazineacetic acid 186392-40-5
     186392-43-8
                   186392-49-4
                                186392-53-0
                                               186392-64-3 186392-65-4
     186429-64-1
                   186429-78-7
                                 186429-91-4
                                               186430-03-5
     186430-41-1
                   186430-57-9
                               186431-27-6
                                               225929-30-6
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pharmaceuticals contg.; prepn. of diazole and triazole quanidine
        derivs. as NHE-1 inhibitors for treatment of ischemia)
L36 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1999:193899 HCAPLUS
DOCUMENT NUMBER:
                         130:227741
TITLE:
                         Solid pharmaceutical dispersions with enhanced
                         bioavailability
INVENTOR (S):
                         Curatolo, William John; Herbig, Scott Max;
                         Nightingale, James Alan Schriver
PATENT ASSIGNEE(S):
                         Pfizer Products Inc., USA
```

Eur. Pat. Appl., 46 pp.

CODEN: EPXXDW

SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT	NO.		KI	ND	DATE			1	APP	LIC	ATIC	ON NO	Э.	DATE			
		- -						-					<u>-</u>						
	EP	9017	86		A.	2	1999	0317]	EP :	199	8-30	0596	0	1998	0727		
	EΡ	EP 901786			A.	3	20000119												
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB	, GI	R,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV	FI,	RO											
	CN	1207	896		Α		1999	0217		(CN :	199	8-13	1628	2	1998	0810		
	JР	1111	6502		A.	2	1999	0427			JP :	199	8-22	2732	8	1998	0811		
	JР	2984	661		В:	2	1999	1129											
	BR	9803	144		Α		2000	0111]	BR :	199	8-33	144		1998	0811		
	US	2002	0094	94	A	1	2002	0124		1	US :	200	1-7	7056	2	2001	0126		
PRIO	RIT	APP	LN.	INFO	. :				1	US :	199'	7-5	522	lP	P	1997	0811		
									1	US :	199	8-1	310	19	B1	1998	0807		

Patent

English

- AB Spray dried solid dispersions comprising a sparingly sol. drug and hydroxypropyl Me cellulose acetate succinate (HPMCAS) provide increased aq. soly. and/or bioavailability in a use environment. Spray dried compns. were prepd. from HPMCAS and compds. such as ziprasidone, griseofulvin, nifedipine and phenytoin.
- IT 9015-71-8, Corticotropin releasing hormone 9035-74-9, Glycogen
 phosphorylase 80619-02-9, 5-Lipoxygenase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; solid pharmaceutical dispersions with enhanced
 bioavailability)
- IT 57-41-0, Phenytoin 126-07-8, Griseofulvin 21829-25-4, Nifedipine
 71138-97-1, Hydroxypropyl methyl cellulose acetate succinate
 146939-27-7, Ziprasidone 175139-41-0 175140-00-8 186392-43-8
 186392-65-4 221163-46-8

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (solid pharmaceutical dispersions with enhanced bioavailability)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 12:08:45 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Aug 30, 2002 (20020830/UP).

=> D QUE L37

6031 SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR L1 PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI 465 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?) L_2 L3153 SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR PKT OR DMA)/RL L447128 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT OR DIABETES MELLITUS+NT, PFT/CT L5 304 SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC CARDIOMYOPATHY"+PFT/CT L6 287453 SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT,PFT/C

```
20270 SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP
L7
               ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
               OR ISCHEMIA+NT, PFT/CT
          9348 SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
L8
               "REPERFUSION (L) INJURY"+PFT/CT
        335374 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                (L2 OR L3 OR L4 OR L5 OR L6
Ь9
                                                                dalma, 6th compound
               OR L7 OR L8)
           1 SEA FILE=REGISTRY ABB=ON PLU=ON 186392-67-6/RN
L15
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L15
L22
L29
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L22
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON WO199639384/PN OR WO199639385/
L31
               DM
L37
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 NOT L31
```

=> FIL REG

FILE 'REGISTRY' ENTERED AT 12:08:55 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L15

L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-67-6 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methyl-2-pyridinylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-hydroxy-3-(methyl-2-pyridinylamino)-3-oxo-1-(phenylmethyl)propyl]-, [R-(R*,S*)]-

FS STEREOSEARCH

MF C25 H23 Cl N4 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:09:22 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10 FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L37

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:554794 HCAPLUS

DOCUMENT NUMBER:

135:132447

TITLE:

Chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for

treatment of diabetic cardiomyopathy

INVENTOR(S):

Treadway, Judith Lee

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA Jpn. Kokai Tokkyo Koho, 35 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE --------------A2 20010731 JP 2001-14036 A2 20010822 EP 2001-300575 JP 2001206856 A2 20010123 EP 1125580 EP 2001-300575 20010123 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO US 2001046958 20011129 US 2001-767633 20010123 A1 PRIORITY APPLN. INFO.: US 2000-177770P P 20000124 Chloroindolephenylethylamide analogs, including 5-chloro-1H-indole-2carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2phenylethyl]amide, etc., and their prodrugs are claimed as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy. title compds. can also combine with insulin, insulin analogs (biguanides), .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma. agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors, .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid receptor antagonists, and/or thyroid hormone analogs for treatment of diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc. IT Blood vessel, disease

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Cardiovascular system

(disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

TΤ Heart, disease

(infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs. 7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin, biological studies 97322-87-7D, TroGlitazone, derivs. 186392-21-2 186392-39-2 186392-40-5 186392-49-4 186392-65-4 **186392-67-6** 186392-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase **inhibitors** for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

=> FIL STNGUIDE

FILE 'STNGUIDE' ENTERED AT 12:09:38 ON 05 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Aug 30, 2002 (20020830/UP).

=> D	QUE L38	
L1	6031	SEA FILE=HCAPLUS ABB=ON PLU=ON PHOSPHORYLASE+PFT/CT OR
		PHOSPHORYLASE B+PFT/CT OR 9035-74-9#/OBI
L2	465	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 (L) (INHIBIT? OR ANTAGONI?)
L3	152	SEA FILE=HCAPLUS ABB=ON PLU=ON (ANTIDIABETIC AGENTS+NT, PFT/CT
	133	OR CARDIOVASCULAR AGENTS+NT, PFT/CT) (L) (THU OR BAC OR PAC OR
		PKT OR DMA)/RL
L4	47128	SEA FILE=HCAPLUS ABB=ON PLU=ON DIABETES INSIPIDUS+NT, PFT/CT
		OR DIABETES MELLITUS+NT, PFT/CT
L5	304	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) DIABETIC
		CARDIOMYOPATHY"+PFT/CT
L6	287453	SEA FILE=HCAPLUS ABB=ON PLU=ON CARDIOVASCULAR SYSTEM+NT, PFT/C
		T
L7	20270	SEA FILE=HCAPLUS ABB=ON PLU=ON "HEART, DISEASE (L) CARDIOMYOP
		ATHY, ISCHEMIC"+PFT/CT OR "HEART, DISEASE (L) ISCHEMIA"+PFT/CT
T 0	0040	OR ISCHEMIA+NT, PFT/CT
L8	9348	SEA FILE=HCAPLUS ABB=ON PLU=ON REPERFUSION+PFT/CT OR
T 0	225254	"REPERFUSION (L) INJURY"+PFT/CT
L9	3353/4	SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8)
L16	1	SEA FILE=REGISTRY ABB=ON PLU=ON 186392-70-1/RN 715 Compound,
L23	-	SEA FILE=REGISTRY ABB=ON PLU=ON 186392-70-1/RN 713 Compound, SEA FILE=HCAPLUS ABB=ON PLU=ON L16
L30	_	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L23
L31	-	SEA FILE=HCAPLUS ABB=ON PLU=ON W0199639384/PN OR W0199639385/
11 T	2	PN
L38	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L30 NOT L31

=> FIL REG

FILE 'REGISTRY' ENTERED AT 12:10:22 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3 DICTIONARY FILE UPDATES: 4 SEP 2002 HIGHEST RN 446821-48-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> D L16

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 186392-70-1 REGISTRY

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[methyl[2-(2-pyridinyl)ethyl]amino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-hydroxy-3-[methyl[2-(2-pyridinyl)ethyl]amino]-3-oxo-1-(phenylmethyl)propyl]-, [R-(R*,S*)]-

FS STEREOSEARCH

MF C27 H27 Cl N4 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 4 REFERENCES IN FILE CA (1967 TO DATE)
- 4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> FIL HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:10:35 ON 05 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2002 VOL 137 ISS 10

FILE LAST UPDATED: 4 Sep 2002 (20020904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D IBIB AB HIT L38 1-2

L38 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709687 HCAPLUS

DOCUMENT NUMBER: 135:272869

TITLE: Synthesis of indolyl-amides as glycogen phosphorylase

inhibitors for treatment of type 2 diabetes

INVENTOR(S): Treadway, Judith Lee

PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 78 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1136071 A2 20010926 EP 2001-301979 20010305

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

JP 2001302546 A2 20011031 JP 2001-78839 20010319

PRIORITY APPLN. INFO: US 2000-191381P P 20000322

OTHER SOURCE(S): MARPAT 135:272869

Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepd. Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temp.) to give amide II. I are glycogen phosphorylase inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

IT Diabetes mellitus

(non-insulin-dependent; synthesis of indolyl-amides as glycogen
phosphorylase inhibitors for treatment of type 2 diabetes)

```
IT
    186392-40-5P
                 186392-46-1P 186392-47-2P
                                             186392-49-4P
                                                           186392-51-8P
    186392-52-9P
                 186392-53-0P 186392-64-3P
                                             186392-65-4P
    186392-70-1P
                186429-64-1P 186429-91-4P 186430-03-5P
    186430-23-9P 186430-41-1P 186430-83-1P 186431-27-6P
                                                           186431-28-7P
    186431-29-8P 225929-30-6P
                               251446-20-5P
                                                           251446-22-7P
                                             251446-21-6P
    251446-23-8P 251446-24-9P 251446-25-0P 251446-26-1P
                                                           251446-27-2P
```

```
251446-28-3P
               251446-29-4P
                              251446-30-7P
                                             251446-31-8P
                                                             251446-32-9P
                              251446-35-2P
                                             332098-11-0P
251446-33-0P
               251446-34-1P
                                                             332098-12-1P
332098-13-2P
                              332098-15-4P
                                             332098-16-5P
                                                             332098-17-6P
               332098-14-3P
                                                             332098-22-3P
332098-18-7P
                              332098-20-1P
                                             332098-21-2P
               332098-19-8P
               332098-24-5P
                              332098-25-6P
                                             332098-26-7P
332098-23-4P
                                                             332098-27-8P
332098-28-9P
               332098-29-0P
                              332098-30-3P
                                             332098-31-4P
                                                             332098-32-5P
                              332098-35-8P
                                             332098-36-9P
332098-33-6P
               332098-34-7P
                                                             332098-37-0P
                              332098-40-5P
                                             332098-41-6P
332098-38-1P
               332098-39-2P
                                                             332098-42-7P
                              332098-45-0P
                                             332098-46-1P
332098-43-8P
               332098-44-9P
                                                             332098-47-2P
                              332098-50-7P
332098-48-3P
               332098-49-4P
                                             332098-52-9P
                                                             332098-54-1P
332098-55-2P
               332098-57-4P
                              332098-59-6P
                                             332098-61-0P
                                                             332098-63-2P
                                             362521-66-2P
332098-65-4P
               362521-64-0P
                              362521-65-1P
                                                             362521-89-9P
362521-91-3P
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

IT 9035-74-9, Glycogen phosphorylase

> RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

L38 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:554794 HCAPLUS

DOCUMENT NUMBER: 135:132447

TITLE:

Chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for

treatment of diabetic cardiomyopathy

INVENTOR(S):

Treadway, Judith Lee

PATENT ASSIGNEE(S): SOURCE:

Pfizer Products Inc., USA Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001206856	A2	20010731	JP 2001-14036	20010123
EP 1125580	A2	20010822	EP 2001-300575	20010123
R: AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IT, LI, LU	, NL, SE, MC, PT,
IE, SI,	LT, LV,	FI, RO		

US 2001046958 20011129 US 2001-767633 A1 20010123 US 2000-177770P P 20000124 PRIORITY APPLN. INFO.:

Chloroindolephenylethylamide analogs, including 5-chloro-1H-indole-2carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2phenylethyl]amide, etc., and their prodrugs are claimed as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy. title compds. can also combine with insulin, insulin analogs (biguanides), .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma. agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors, .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid receptor antagonists, and/or thyroid hormone analogs for treatment of diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc.

IT Blood vessel, disease

(diabetic angiopathy; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(diabetic cardiomyopathy;

chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Cardiovascular system

(disease; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(failure; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(infarction; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of **diabetic** cardiomyopathy and other cardiovascular diseases)

IT Heart, disease

(ischemia; chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 56-03-1D, Biguanide, derivs. 504-75-6D, Imidazoline, derivs.
7440-62-2D, Vanadium, salts, biological studies 9004-10-8, Insulin,
biological studies 97322-87-7D, TroGlitazone, derivs. 186392-21-2
186392-39-2 186392-40-5 186392-49-4 186392-65-4 186392-67-6
186392-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase **inhibitors** for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

```
Jisplas que B. Chism; 09/767,633
                                                                                Page 1
               for me 31
=> d que 131.
                 14
                       12
                          Hor Alkal-Esse node 16 above)
VAR G1=H/(16) =
NODE ATTRIBUTES:
                               size of alkyl group @ node 16 is limited
CONNECT IS E2 RC AT
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
                                                   of 1 to Maximum of 5
ECOUNT IS M1-X5 C
                               (m1-x5)
GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS
                                                 - search of structure in Registry file
12 & search Registry hits in HCAPLUS
STEREO ATTRIBUTES: NONE
           2665) SEA FILE=REGISTRY SSS FUL L1 4
            473) SEA FILE=HCAPLUS ABB=ON PLU=ON
1.3
                                                  9035-74-9/RN & Registry # for
              1) SEA FILE=REGISTRY ABB=ON PLU=ON
T.4
           4127) SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 L4
1.5
                                                  PHOSPHORYLASE+PFT/CT OR
           6031) SEA FILE=HCAPLUS ABB=ON PLU=ON
L6
                PHOSPHORYLASE B+PFT/CT OR L5
            465) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L6 (L) (INHIBIT? OR ANTAGONI?)
L7
             16) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L7 AND L3
L8
                                                  ANTIDIABETIC AGENTS+NT, PFT/CT
          10520) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
L9
             26) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L3 AND L9
L10 (
          47097) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  DIABETES INSIPIDUS+NT, PFT/CT
L11 (
                OR DIABETES MELLITUS+NT, PFT/CT
                                                  L3 AND L11
                                         PLU=ON
L12 (
             14) SEA FILE=HCAPLUS ABB=ON
            304) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  "HEART, DISEASE (L) DIABETIC
L13 (
                CARDIOMYOPATHY"+PFT/CT
                                                                                      e orresp
                                          PLU=ON
                                                  L3 AND L13
L14 (
              3) SEA FILE=HCAPLUS ABB=ON
          57969) SEA FILE=HCAPLUS ABB=ON
                                                  CARDIOVASCULAR AGENTS+NT, PFT/C
L15 (
                                          PLU=ON
                                          PLU=ON
                                                  L3 AND L15
L16 (
             65) SEA FILE=HCAPLUS ABB=ON
                                                  L3 (L) (THU OR BAC OR BUU OR
            248) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
L17 (
                DMA)/RL
             46) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L17 AND L16
L18 (
                                          PLU=ON
                                                  CARDIOVASCULAR SYSTEM+NT, PFT/C
L19 (
         287361) SEA FILE=HCAPLUS ABB=ON
                Т
                                          PLU=ON
                                                  L3 AND L19
L20 (
             44) SEA FILE=HCAPLUS ABB=ON
                                                  "HEART, DISEASE (L) ISCHEMIA"+
L21 (
          15610) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                PFT/CT
                                                  L3 AND L21
L22 (
             13) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
L23 (
           9343) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  REPERFUSION+PFT/CT OR
                "REPERFUSION (L) INJURY"+PFT/CT
L24 (
              4) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L3 AND L23
```

```
B. Chism; 09/767,633
           4973) SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 ISCHEMIA+NT, PFT/CT
L25 (
              6) SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 L3 AND L25
L26 (
                                                 L8 OR L10 OR L12 OR L14 OR
L27 (
             93) SEA FILE=HCAPLUS ABB=ON PLU=ON
                L18 OR L20 OR L22 OR L24 OR L26
                                                 WO199639384/PN OR WO199639385/
              2) SEA FILE=HCAPLUS ABB=ON
                                         PLU=ON
L28 (
                PN
L29 (
             91) SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 L27 NOT L28
                                                 (((GLYCOGEN/AB (5A) PHOSPHORYL
         334749) SEA FILE=HCAPLUS ABB=ON PLU=ON
L30 (
                ?/AB (5A) INHIBIT?/AB) OR (DIABET?/AB) OR (CARDIO?/AB OR
                HEART/AB OR MYOCARDI?/AB) OR (ISCHEMIA/AB (5A) MYOCARD?/AB) OR
                (REPERFUS?/AB OR RE-PERFUS?/AB))) OR (((GLYCOGEN/TI (5A)
                PHOSPHORYL?/TI (5A) INHIBIT?/TI) OR (DIABET?/TI) OR (CARDIO?/TI
                 OR HEART/TI OR MYOCARDI?/TI) OR (ISCHEMIA/TI (5A) MYOCARD?/TI)
                                                                                  146)an
                 OR (REPERFUS?/TI OR RE-PERFUS?/TI)))
             30 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND L30
L31
=> D IBIB ABS HITSTR 1-30
                         2002:484863 HCAPLUS
DOCUMENT NUMBER:
                         137:47448
                         Preparation of substituted phenylalaninol derivatives
```

L31 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

TITLE:

as protein tyrosine phosphatase inhibitors

INVENTOR (S):

Larsen, Scott D.; May, Paul D.; Bleasdale, John E.; Liljebris, Charlotta; Schostarez, Heinrich Josef;

Barf, Tjeerd; Nilsson, Marianne

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 144 pp., Cont.-in-part of U.S. Ser. No. 138,642.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.			KIND DATE			APPLICATION NO.						DATE						
					20020625		US 1999-265410					 0	19990310					
							20020305											
	WO														20000309			
		W:	ΑE,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ВA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD.	MG.	MK.	MN.	MW.	MX.	NO.	NZ.	PL.	PT.	RO.	RU.	SD,	SE.	SG.	SI.
					•	•		-		-	-	-	•		YU,	-	•	•
								RU,			00,	00,	02,	• • • •	10,	,	,	,
		DI.	•	•	•	•	•	•	•		m rz	110	77 T.T	7 m	ъп	OTT.	G37	DE
		KW:													BE,			
			DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PΤ,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
	EΡ	1161	421		A	1	2001	1212		EP 2000-917793 200					20000	0309		
		R:	AT,	BE,	CH.	DE.	DK.	ES,	FR.	GB,	GR,	IT.	LI.	LU,	NL,	SE.	MC.	PT.
							FI,				•			•	,	,		,
PRIOF	ידידכ	Z DD			•	,	,		1	TC 1	997-	5773	ΛD	D	1997	1828		
INIO		. ALL	ши.	11110	• •									_				
															1998			
									1	US 1	999-:	2654	10	Α	1999	0310		
									1	WO 2	000-1	US60:	22	W	20000	0309		
OTHER	R SC	URCE	(S):			MAR	PAT	137:	4744	8								

GI

)

The invention comprises phenylalaninol derivs., e.g., I [R1 = OSO3H, OCH(CO2R5)2, OCH2CO2R5, OCH(CO2R5)CH2CO2R5, OC(CO2R5):CHCO2R5, CH2CH(CO2R5)2, CH:C(CO2R5)2, OCH2CONHOH, N(CH2CO2R5)2, OCHFCO2R5 (R5 = H, alkyl, alkylphenyl); R2 = CHR7NHXR6, group Q (R6 = alkyl, alkyl-CONH2, alkyl-NHCO2R5, etc.; R7 = H, any group given for R6); R10 = H, CO2R5, CONHOH, 5-tetrazolyl, F, OCH2CO2R5], or their pharmaceutically acceptable salts, as small mol. wt., non-peptidic inhibitors of protein tyrosine phosphatase 1 (PTP1) which are useful for the treatment and/or prevention of non-insulin dependent diabetes mellitus. Thus, 5-[(2S)-2-[((2S)-2-[(tert-butoxycarbonyl)amino]-3-phenylpropanoyl]amino]-3-hydroxypropyl]-2-(carboxymethoxy)benzoic acid (claimed compd.) was prepd. and showed 80% inhibition of protein tyrosine phosphatase 1B at a concn. of 10 .mu.M.

IT 292833-72-8P 292833-82-0P 292833-93-3P 292834-05-0P 292834-16-3P 292834-26-5P

I

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(prepn. of substituted phenylalanine derivs. as protein tyrosine phosphatase inhibitors)

RN 292833-72-8 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-oxo-3-(pentylamino)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH₂)
$$\frac{H}{4}$$
 N CO₂H O CO₂H

RN 292833-82-0 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-oxo-3-[(4-phenylbutyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & H & & CO_2H \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 292833-93-3 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-3-[[4-(4-chlorophenyl)butyl]amino]-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$CO_2H$$
 CO_2H
 CO_2

RN 292834-05-0 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-[[4-(4-methoxyphenyl)butyl]amino]-3-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 292834-16-3 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-oxo-3-[[2-(phenylmethoxy)ethyl]amino]propyl]- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 292834-26-5 HCAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]-3-oxo-3-(propylamino)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:309882 HCAPLUS

DOCUMENT NUMBER:

136:325415

TITLE:

Preparation of mono- and bis-indolylquinones as GRB-2

adaptor protein inhibitors for treatment of cell proliferative disorders and insulin-related disorders

INVENTOR(S):

Tang, Peng Cho; McMahon, Gerald; Harris, G. Davis,

Jr.; Lipson, Ken

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 41 pp., Cont.-in-part of U.S. Ser. No.

6,090,838. CODEN: USXXAM

me.

DOCUMENT TYPE:

Patent

LANGUAGE: Facche

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6376529	B1	20020423	US 1999-405244 19990924
US 5780496	Α	19980714	US 1996-658337 19960605
US 5786488	Α	19980728	US 1997-964791 19971105
US 6110957	Α	20000829	US 1998-72861 19980505

```
US 6090838
                        Α
                             20000718
                                             US 1998-90737
                                                               19980604
     WO 2001021589
                                             WO 2000-US26235 20000925
                       A2
                             20010329
     WO 2001021589
                       Α3
                             20020117
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            EP 2000-965395
     EP 1218342
                       A2
                           20020703
                                                              20000925
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.:
                                          US 1995-476136
                                                            B2 19950607
                                          US 1996-658337
                                                            A1 19960605
                                          US 1996-30604P
                                                            P 19961113
                                          US 1997-42989P
                                                            P 19970414
                                          US 1997-964791
                                                           A3 19971105
                                          US 1998-72861
                                                           A2 19980505
                                          US 1998-90737
                                                            A2 19980604
                                          US 1999-405244
                                                            A1 19990924
                                          WO 2000-US26235 W 20000925
OTHER SOURCE(S):
                          MARPAT 136:325415
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein A = mono- or bicyclic aryl, heteroaryl, (alkyl)carboxy, alkyl(aryl), alkynyl, alkenylcarboxy, hydroxy(alkyl), alkoxy, NO2, halo, trihalomethyl, amido, carboxamido, sulfonyl, sulfonamido, amino, mercapto, or 2-methylbut-2-en-4-yl; R1 and R2 = independently H, halo, OH, or OCOR; R = alkyl(aryl) or aryl; R1a and R2a = independently H, alkyl, alkenyl, alkynyl, or (alkyl)aryl; R3-R6 and R8-R11 = independently H, alkyl(carboxy), alkenyl(carboxy), alkynyl, (alkyl)aryl, hydroxy(alkyl), alkoxy, NO2, halo, trihalomethyl, amido, carboxamido, carboxy, sulfonyl, sulfonamido, amino, mercapto, or 2-methylbut-2-en-4-yl; R12 = H, mono- or bicyclic aryl, heteroaryl, alkyl(carboxy), alkenyl(carboxy), alkynyl, (alkyl)aryl, hydroxy(alkyl), alkoxy, NO2, halo, trihalomethyl, amido, carboxamido, carboxy, sulfonyl, sulfonamido, amino, mercapto, or 2-methylbut-2-en-4-yl; with provisos; or pharmaceutically acceptable salts thereof] were prepd. as GRB-2 adaptor protein inhibitors. I are useful for ameliorating the symptoms of cell proliferative disorders assocd. with CRB-2 adaptor protein function and for treating insulin-related disorders, such as diabetes, insulin resistance, insulin deficiency, and insulin allergy. For example, a mixt. of tetrabromo-1,4-benzoquinone, 2-phenylindole, and Cs2CO3 in AcCN was stirred at room temp. for 3 h. Addn. of 2-(3-methylbutyl)indole, stirring at room temp. for 24 h, and heating to 85.degree.C with THF, EtOH, and KOH for 10 h afforded II. The latter effectively bound tyrosine phosphorylated EGF-receptor to a GRB-2 SH2 peptide domain, inhibited A431 vulvar carcinoma tumor cell growth in vivo by 49% at 75 mg/kg/day and 55% at 100 mg/kg/day, gave an EC50 of 6.5 .mu.M in the LDH cytotoxicity assay, and both stimulated phosphorylation of insulin receptor tyrosine kinase and allowed deactivation of the insulin receptor in NIH 3T3 cells. IT

331632-13-4P, 3-[2-(N-Butylcarboxamido)indol-3-yl]-6-(2-butylindol-

3-yl)-2,5-dihydroxy-1,4-quinone

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(GRB-2 inhibitor; prepn. of indolylquinones as GRB-2 adaptor protein inhibitors for treatment of cell proliferative disorders and insulin-related disorders)

RN 331632-13-4 HCAPLUS

1H-Indole-2-carboxamide, N-butyl-3-[4-(2-butyl-1H-indol-3-yl)-2,5-dihydroxy-3,6-dioxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

119 THERE ARE 119 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L31 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:170712 HCAPLUS

DOCUMENT NUMBER:

136:365703

TITLE:

CN

The 1.76 .ANG. resolution crystal structure of

glycogen phosphorylase b complexed with glucose, and

CP 320626, a potential antidiabetic drug

AUTHOR (S):

Oikonomakos, Nikos G.; Zographos, Spyros E.; Skamnaki,

Vicky T.; Archontis, Georgios

CORPORATE SOURCE:

Institute of Biological Research and Biotechnology, The National Hellenic Research Foundation, Athens,

11635, Greece

SOURCE:

Bioorganic & Medicinal Chemistry (2002), 10(5),

1313-1319

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB CP 320626, a potential antidiabetic drug, inhibits glycogen phosphorylase (I) in synergism with glucose.

To elucidate the structural basis of synergistic inhibition, the authors detd. the crystal structure of muscle I complexed with both glucose and CP 320626 at 1.76 .ANG. resoln., and refined it to a crystallog. R value of 0.211 (Rfree = 0.235). CP 320626 was found to bind at a novel allosteric site, which was .apprx.33 .ANG. from the catalytic site, where glucose binds. The high-resoln. structure allowed unambiguous definition of the conformation of the 1-acetyl-4-hydroxy-piperidine ring supported by theor. energy calcns. Both CP 320626 and glucose promoted the less active T-state, thereby explaining their synergistic inhibition. Structural comparison of the I.cntdot.glucose.cntdot.CP 320626 complex with liver glycogen phosphorylase a (II) complexed with a related compd. (CP 403700)

Absolute stereochemistry.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:104618 HCAPLUS

DOCUMENT NUMBER: 136:145214

TITLE: Use of glycogen phosphorylase

inhibitors to inhibit tumor growth

INVENTOR(S): Krasner, Alan Seth

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE --------------------EP 2001-306440 EP 1177791 A2 20020206 20010727 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002128673 20020509 JP 2001-226129 20010726 A2 US 2002123513 A1 20020905 US 2001-919205 20010731 PRIORITY APPLN. INFO.: US 2000-221717P P 20000731 OTHER SOURCE(S): MARPAT 136:145214 AB The invention relates to the use of glycogen phosphorylase inhibitors to inhibit abnormal cell growth in mammals, including humans. The invention also relates to pharmaceutical compns. contg. glycogen phosphorylase inhibitors alone or in combination with other glycogen phosphorylase inhibitors or other inhibitors of abnormal cell growth, and to methods of treating cancer,

```
hyperproliferative disorders, or abnormal cell growth in a mammal by
     administering to a mammal in need thereof the compds. and compns. of the
     invention.
     9012-69-5P, Glycogen phosphorylase B
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     BIOL (Biological study); PREP (Preparation)
        (glycogen phosphorylase inhibitor to inhibit tumor
        growth)
     9012-69-5 HCAPLUS
RN
     Phosphorylase b (9CI)
                            (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9035-74-9P, Glycogen phosphorylase
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PUR (Purification or recovery); BIOL (Biological study); PREP
     (Preparation)
        (qlycogen phosphorylase inhibitor to inhibit tumor
        growth)
     9035-74-9 HCAPLUS
RN
CN
     Phosphorylase (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     186392-09-6 186392-46-1 186392-47-2
     186392-51-8 186392-52-9 186392-53-0
     186392-64-3 186429-66-3 186430-04-6
     186430-23-9 186430-40-0 186431-27-6
     186431-28-7 208830-24-4 208830-25-5
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (glycogen phosphorylase inhibitor to inhibit tumor growth)
RN
     186392-09-6 HCAPLUS
CN
     1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(4-methyl-1-
     piperazinyl)-3-oxo-1-(phenylmethyl)propyl]-, monohydrochloride (9CI)
     INDEX NAME)
```

Absolute stereochemistry.

HCl

```
RN 186392-46-1 HCAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(3-hydroxy-1-azetidinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 186392-47-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(2-isoxazolidinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-51-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(4-morpholinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-52-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-oxo-1-(phenylmethyl)-3-(tetrahydro-2H-1,2-oxazin-2-yl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-53-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(3S)-3-hydroxy-1-pyrrolidinyl]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-64-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-66-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-(3-hydroxy-1-pyrrolidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

RN 186430-04-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-oxo-2-(3-thiazolidinyl)ethyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-40-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-27-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-azetidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-28-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[3-(hydroxyimino)-1-azetidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 208830-24-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(3,4-dihydroxy-1-pyrrolidinyl)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 208830-25-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3,4-dihydroxy-1-pyrrolidinyl)-2-oxo-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:10432 HCAPLUS

DOCUMENT NUMBER: 136:85669

TITLE: Preparation of (e.g.) N-alkylaryl-N-aryl-N'-aryl ureas

as glucagon antagonists/inverse agonists

INVENTOR(S): Jorgensen, Anker Steen; Christensen, Inge Thoger;

Kodra, Janos Tibor; Madsen, Peter; Behrens, Carsten;

Sams, Christian; Lau, Jesper

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 201 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

Searched by Thom Larson, STIC, 308-7309

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

```
PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
                                           -----
                      ----
                            -----
                                         WO 2001-DK435
     WO 2002000612
                     A1
                            20020103
                                                            20010621
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK; LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          AU 2001-65834
     AU 2001065834
                      A5
                            20020108
                                                             20010621
                                                         A 20000623
PRIORITY APPLN. INFO.:
                                        DK 2000-984
                                        DK 2000-1734
                                                         A 20001117
                                        WO 2001-DK435
                                                         W 20010621
```

OTHER SOURCE(S): MARPAT 136:85669

GI

Title compds. R1OC(0)-A-CR2R3-N(R4)-C(0)-Z-CHR5-N(E)-X-D [R1-5 = H, alkyl; AB A = C(0), CH-alkoxy, CHF; Z = (un) substituted arylene or a divalent radical derived from a 5 or 6 membered heteroarom. ring contq. 1 or 2 heteroatoms selected from N, O and S; X = alkyl, acyl, amido, etc.; D = (un) substituted Ph, naphthyl, pyridyl, benzothiophenyl, etc.; E = (un) substituted cyclohexyl, Ph, benzyl, phenethyl, etc.; I] were prepd. Examples include data for 73 compds., two glucagon receptor binding assays and a glucose-dependent insulinotropic peptide (GIP) receptor binding assay. E.g., 4-cyclohexylaniline was reductively alkylated with 4-formyl benzoic acid Me ester (MeOH, HOAc, NaCNBH3) in 87% yield. The amine was added to an isocyanate derived from 5-methoxy-3-trifluoromethylaniline (prepn. given; CH2Cl2, room temp.) to give a urea as an oil that was sapond. (EtOH, NaOH, room temp., 16 h) to give the solid carboxylic acid in 49% yield. The carboxylic acid was coupled to (R)-isoserine Et ester (DMF, HOBt, EDAC) followed by hydrolysis to give example compd. II as a cryst. solid. In a glucagon receptor binding assay, compds. of the

invention had IC50 < 1500 nM and many were below 250 nM. I are useful in the treatment or prevention of any diseases wherein a glucagon antagonistic action is beneficial, such as hyperglycemia, type 1 diabetes, type 2 diabetes, disorders of lipid metab. and obesity.

IT 385836-75-9P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug; prepn. of N-alkylaryl-N-aryl-N'-aryl ureas as glucagon antagonists/inverse agonists)

ВM 385836-75-9 HCAPLUS

Propanoic acid, 3-[[4-[[(2,2-diphenylethyl)[[5-(trifluoromethoxy)-1H-indol-CN 2-yl]carbonyl]amino]methyl]benzoyl]amino]-2-hydroxy-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:936092 HCAPLUS

DOCUMENT NUMBER:

136:53752

TITLE:

Synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with

(e.q.) NHE-1 inhibitors

INVENTOR (S):

Mylari, Banavara L.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 41 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 2001056095 20011227 US 2001-782798 A1 20010213 PRIORITY APPLN. INFO.: US 2000-183004P P 20000216 GI

Ι

AB Mono-, di- and triethanolamine salts of [4-0xo-(5trifluoromethylbenzothiazol-2-ylmethyl)-3,4-dihydrophthalazin-1-yl]acetic acid (zopolrestat; I) were prepd. E.g., a soln. of I in acetone was added to ethanolamine (10 mol equiv, room temp., 1 h) which afforded, after purifn., the ethanolamine salt in 95% yield, m.p. 119 - 121.degree.C. Ethanolamine salts of I are used alone or with NHE-1 inhibitors (e.g. II), selective serotonin reuptake inhibitors (SSRIs, e.g. fluoxetine), glycogen phosphorylase inhibitors (GPIs), sorbitol dehydrogenase inhibitors (SDIs) and antihypertensive agents for treating diabetic complications.

IT 186392-65-4

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination pharmaceutical; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)

RN 186392-65-4 HCAPLUS

1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1

inhibitors)

RN 9035-74-9 HCAPLUS

Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709687 HCAPLUS

DOCUMENT NUMBER:

135:272869

TITLE:

CN

Synthesis of indolyl-amides as glycogen

phosphorylase inhibitors for treatment of type 2 diabetes

INVENTOR(S):
PATENT ASSIGNEE(S):

Treadway, Judith Lee Pfizer Products Inc., USA Eur. Pat. Appl., 78 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
EP 1136071 A2 20010926 EP 2001-301979 20010305

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

JP 2001302546 A2 20011031 JP 2001-78839 20010319 PRIORITY APPLN. INFO.: US 2000-191381P P 20000322

OTHER SOURCE(S): MARPAT 135:272869

GΙ

Ι

$$\begin{array}{c|cccc}
R^4 & R^6 \\
\hline
0 & & R^7 \\
\hline
0 &$$

Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A AB = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 =carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepd. Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temp.) to give amide II. I are glycogen phosphorylase inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

II

186392-40-5P 186392-46-1P 186392-47-2P 186392-49-4P 186392-51-8P 186392-52-9P 186392-53-0P 186392-64-3P 186392-65-4P 186392-70-1P 186429-64-1P 186429-91-4P 186430-03-5P 186430-23-9P 186430-41-1P 186430-83-1P 186431-27-6P 186431-28-7P 186431-29-8P 225929-30-6P 362521-64-0P 362521-65-1P 362521-66-2P 362521-89-9P 362521-91-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

RN 186392-40-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-46-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(3-hydroxy-1-azetidinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-47-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(2-isoxazolidinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-49-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(2-hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

RN 186392-51-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(4-morpholinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-52-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-oxo-1-(phenylmethyl)-3-(tetrahydro-2H-1,2-oxazin-2-yl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-53-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(3S)-3-hydroxy-1-pyrrolidinyl]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

RN 186392-64-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-65-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-70-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[methyl[2-(2-pyridinyl)ethyl]amino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-64-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxoethyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 186429-91-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[(3S,4R)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-03-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-(1,1-dioxido-3-thiazolidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & H & O & O & O \\
 & N & C & NH - CH_2 - C & N & S & O
\end{array}$$

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 186430-41-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-piperidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-83-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(2-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-27-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-azetidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-28-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[3-(hydroxyimino)-1-azetidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-29-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[4-(hydroxyimino)-1-piperidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225929-30-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[3-(hydroxyimino)-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 362521-64-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5,6-dichloro-N-[(1S,2R)-2-hydroxy-3[(methoxymethyl)amino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 362521-65-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(methoxymethyl)amino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 362521-66-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(4-methyl-1-piperazinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 362521-89-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-oxo-4-(3-thiazolidinyl)butyl]-(9CI) (CA INDEX NAME)

RN 362521-91-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2,3-dioxo-3-(3-thiazolidinyl)propyl](9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O & O & O \\ N & \parallel & \parallel & \parallel \\ C - NH - CH_2 - C - C - N & O \\ \end{array}$$

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:693088 HCAPLUS

DOCUMENT NUMBER: 135:262225

TITLE: Glycogen phosphorylase inhibitor compositions

INVENTOR(S): Babcock, Walter C.; Friesen, Dwayne Thomas; Lorenz,

Douglas Alan; Macri, Christopher A.; Nightingale, James Alan Schriver; Shanker, Ravi Mysore; Hancock,

Bruno Caspar; Crew, Marshall D.

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE ______ _____ _ _ _ _ WO 2001068092 20010920 WO 2001-IB389 20010316 A2 WO 2001068092 Α3 20020321 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2001053791 A1 20011220 US 2001-808559 20010314

PRIORITY APPLN. INFO.: US 2000-190125P P 20000316

AB Pharmaceutical compns. of a particularly effective sparingly sol.

glycogen phosphorylase inhibitor are

disclosed. Thus, an amorphous solid dispersion contg. 25% a drug and 75% polymer was made by first mixing the drug in acetone together with a finely powd. HPMCAS to form a soln. The soln. comprised 1.25% drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by directing an atomizing spray via a 2-fluid external mix spray nozzle at 2.6 bar at a 175 to 180 g/min feed rate into a stainless steel chamber of a NIRO XP spray drier, maintained at a temp. of 180.degree. at the inlet and 69.degree. at the outlet.

IT 186392-65-4

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (glycogen phosphorylase inhibitor compns.)

RN 186392-65-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 9035-74-9, Glycogen phosphorylase

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitor; glycogen phosphorylase inhibitor
 compns.)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:693054 HCAPLUS

DOCUMENT NUMBER:

135:247221

TITLE:

Pharmaceutical compositions containing

glycogen phosphorylase

inhibitors

INVENTOR(S):

Hoover, Dennis Jay; Shanker, Ravi Mysore; Friesen, Dwayne Thomas; Lorenz, Douglas Alan; Nightingale,

James Alan Schriver

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     -----------
                    ----
                                         -----
    WO 2001068055 A1 20010920 WO 2001-IB394 20010316
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     A1 20011220
                                         US 2001-805828 20010314
    US 2001053778
PRIORITY APPLN. INFO.:
                                       US 2000-189942P P 20000316
                        MARPAT 135:247221
OTHER SOURCE(S):
    Pharmaceutical compns. comprise a glycogen phosphorylase
     inhibitor and at least one concn.-enhancing polymer. The compn.
    may be a simple phys. mixt. of glycogen phosphorylase
    inhibitor and concn.-enhancing polymer or a dispersion of
    glycogen phosphorylase inhibitor and polymer.
    A dispersion of 25% 5-chloro-lH-indole-2-carboxylic acid
     [(1S)-benzyl-(2R)-hydroxy-3-((3R,4S)-dihydroxypyrrolidin-1-yl)-3-
    oxypropyl]amide and 75% polymer was made by first mixing the drug in
     acetone together with HPMCAS to form a soln. The soln. comprised 1.25
    drug, 3.75% HPMCAS, and 95% acetone. This soln. was then spray-dried by
    directing an atomizing spray using a 2-fluid external-mix spray nozzle at
     2.6 bar at a feed rate of 175 to 180 g/min into the stainless-steel
    chamber of a spray-dryer, maintained at 180.degree. on the inlet and
     69.degree. at the outlet. The resulting amorphous solid spray-dried
    dispersion was collected and then dried in a solvent tray-dryer by
     spreading the spray-dried particles onto polyethylene-lined trays to a
    depth of not >1 cm and then drying them at 40.degree. for at least 8 h.
IT
    9035-74-9, Glycogen phosphorylase
    RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
        (inhibitors; pharmaceutical compns. contg. glycogen
       phosphorylase inhibitors)
RN
     9035-74-9 HCAPLUS
CN
    Phosphorylase (9CI)
                        (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    186392-40-5 186392-43-8 186392-51-8
    186392-53-0 186392-63-2 186392-65-4
    186429-91-4 186430-03-5 186430-23-9
    186430-40-0 186430-57-9 186431-27-6
    361176-31-0
    RL: BPR (Biological process); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (pharmaceutical compns. contg. glycogen phosphorylase inhibitors)
RN
     186392-40-5 HCAPLUS
CN
     1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-
     oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)
```

RN 186392-43-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-51-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(4-morpholinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-53-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(3S)-3-hydroxy-1-pyrrolidinyl]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-63-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4R)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-65-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-91-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[(3S,4R)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-03-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-(1,1-dioxido-3-thiazolidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-40-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-57-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-(1-oxido-3-thiazolidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 186431-27-6 HCAPLUS

1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-azetidinyl)-2-oxo-CN1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 361176-31-0 HCAPLUS

1H-Indole-2-carboxamide, 5-chloro-N-[2-[(3S,4R)-3,4-dihydroxy-1-CN pyrrolidinyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2002 ACS L31 ANSWER 10 OF 30

ACCESSION NUMBER:

REFERENCE COUNT:

2001:554794 HCAPLUS

DOCUMENT NUMBER:

135:132447

TITLE:

Chloroindolephenylethylamide analogs and their

prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic

cardiomyopathy

INVENTOR(S):

Treadway, Judith Lee

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

SOURCE:

Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
JP 2001206856	A2	20010731	JP 2001-14036	20010123				
EP 1125580	A2	20010822	EP 2001-300575	20010123				
R: AT, BE,	CH, DE	, DK, ES, FR, C	B, GR, IT, LI, LU	, NL, SE, MC, PT,				
IE, SI,	LT, LV	, FI, RO						
US 2001046958	A1	20011129	US 2001-767633	20010123				
PRIORITY APPLN. INFO	.:	US	S 2000-177770P P	20000124				
AB Chloroindolephe	nylethy	lamide analogs,	, including 5-chlo	ro-1H-indole-2-				

carboxylic acid [(1S)-((R)-hydroxydimethylcarbamoylmethyl)-2phenylethyl]amide, etc., and their prodrugs are claimed as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy. The title compds. can also combine with insulin, insulin analogs (biguanides), .alpha.2-antagonists, imidazolines, glitazone derivs., PPAR.gamma. agonists, fatty acid oxidn. inhibitors, .alpha.-glucosidase inhibitors, .beta.-agonists, phosphodiesterase inhibitors, hypolipidemics, antiobesity agents, vanadium salts, glucagon antagonists, somatostatin analogs, aldose reductase inhibitors, sorbitol dehydrogenase inhibitors, glucocorticoid receptor antagonists, and/or thyroid hormone analogs for treatment of diabetes, cardiovascular diseases, heart ischemia, congestive heart failure, hypertension, diabetic angiopathy, myocardial infarction, etc. ΙT 186392-21-2 186392-39-2 186392-40-5 186392-49-4 186392-65-4 186392-67-6 186392-70-1 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase inhibitors for treatment of diabetic cardiomyopathy and other cardiovascular diseases) RN186392-21-2 HCAPLUS 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-3-(methoxymethylamino)-3-oxo-1-CN (phenylmethyl)propyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-39-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5,6-dichloro-N-[(1S,2R)-2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-40-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

RN 186392-49-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(2-hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-65-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-67-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methyl-2-pyridinylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

RN 186392-70-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[methyl[2-(2-pyridinyl)ethyl]amino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chloroindolephenylethylamide analogs and their prodrugs as glycogen phosphorylase **inhibitors** for treatment of diabetic cardiomyopathy and other cardiovascular diseases)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:435041 HCAPLUS

DOCUMENT NUMBER: 135:33431

TITLE: Preparation of cycloamine as CCR5 receptor antagonists

INVENTOR(S): Shiota, Tatsuki; Yokoyama, Tomonori; Kamimura, Takashi

PATENT ASSIGNEE(S): Teijin Limited, Japan SOURCE: PCT Int. Appl., 271 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE				APPLICATION NO. DATE												
WO 2001042208 A1			1 :	2001	0614		WO 2000-JP8627					20001206				
₩:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO:
JP 1999-348778 A 19991208
OTHER SOURCE(S):
MARPAT 135:33431
GI

Therapeutic or preventive agents for .beta.-chemokine receptor AB CCR5-related diseases such as AIDS, rheumatoid arthritis, and nephritis, contq. as the active ingredient, cyclic amine derivs. such as piperidine and pyrrolidine derivs. of general formula [I; R1 = (un) substituted Ph, C3-8 cycloalkyl, or arom. heterocyclyl contg. 1-3 heteroatoms of O, S, and/N wherein Ph and arom. heterocyclyl group is optionally condensed to benzene ring or heterocyclyl ring contg. 1-3 heteroatoms of O, S, and/N to from an (un)substituted condensed ring; R2 = H, (un)substituted C1-6 alkyl or Ph, C2-7 alkoxycarbonyl, HO; j, k = 0-2; m = 2-4; n = 0,1; R3 = H, (un) substituted phenyl-optionally substituted C1-6 alkyl; R4, R5 = H, HO, Ph, (un) substituted C1-6 alkyl; or R4 and R5 together represent a 3-6-membered ring cyclic hydrocarbyl; p, q = 0.1; G = CO, SO2, CO2, NR7CO, CONR7, NHCONH, NHC(S)NH, NR7SO2, SO2 NR7, NHCO2, O2CNH (wherein R7 = H, C1-6 alkyl; or R7 and R5 together form C2-5 alkylene); R6 = (un) substituted C3-8 cycloalkyl, C3-6 cycloalkenyl, Ph, benzyl, or arom. heterocyclyl contg. 1-3 heteroatoms of O, S, and/N, wherein Ph, benzyl, and arom. heterocyclyl are optionally condensed with benzene ring or arom. heterocyclyl group contg. 1-3 heteroatoms of O, S, and/N to form an (un) substituted condensed ring], pharmaceutically acceptable adducts of the same with acids, or pharmaceutically acceptable adducts thereof with C1-6 alkyl, are described. Above CCR5-related diseases include diseases accompanied by destruction of cartilage or bone (in particular chronic rheumatoid arthritis), nephritis or kidney diseases (in particular glomerulonephritis, interstitial nephritis, or nephrosis), demyelinating diseases (in particular multiple sclerosis), post-transplant rejection, host-vs.-graft diseases (GVHD), diabetes, chronic obstructive pulmonary diseases (COPD), bronchial asthma, atopic dermatitis, sarcoidosis, fibrosis, arteriosclerosis, psoriasis, and inflammatory bowel diseases. Thus, 3-(trifluoromethylthio)benzoic acid was condensed with (R) -1-(4-chlorobenzyl) -3-(glycylamino)pyrrolidine using diisopropylcarbodiimide and HOBt in tert-butanol and CHCl3 at room temp. for 15 h to give (R)-1-(4-chlorobenzyl)-3-[[N-(3-(trifluoromethylthio)benzoyl)glycyl]amino]pyrrolidine (II). II and (R) -1-(6-methyl-3-indolylmethyl) -3-[[N-(2-amino-5-(trifluoromethoxy)benzoyl)glycyl]amino]pyrrolidine 10 .mu.M in vitro inhibited by 20-50% and >80%, resp., the binding of [1251] macrophage inflammatory protein-1.alpha. (MIP-1.alpha.) to CCR5-receptor expressed in CHO cells.

IT 226238-52-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cycloamine as CCR5 receptor antagonists for therapeutics or remedies of .beta.-chemokine receptor CCR5-related diseases such as AIDS, rheumatoid arthritis, and nephritis)

RN 226238-52-4 HCAPLUS

1H-Indole-2-carboxamide, N-[2-[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-2-oxoethyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O & O \\ N & C-NH-CH_2-C-NH-CH_2 \end{array}$$

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 12 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:228870 HCAPLUS

DOCUMENT NUMBER:

134:262851

TITLE:

CN

Isoxazoline derivative caspase inhibitors for

pharmaceutical uses

INVENTOR(S):

Kim, Eunice Eun-Kyeong; Park, Mi-Jeong; Lee, Tae-Hee; Chang, Hye-Kyung; Park, Tae-Kyo; Kang, Chang-Yuil; Kim, Young-Myeong; Moon, Kwang-Yul; Oh, Young-Leem;

Min, Chang-Hee; Chung, Hyun Ho

PATENT ASSIGNEE(S):

SOURCE:

LG Chemical Ltd., S. Korea

PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	FENT	NO.		KIND DATE APPLICATION NO. DATE													
WO 2001021600			A1 20010329					WO 2000-KR1047 20000918									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UΑ,	ŪĠ,	US,	UΖ,	VN,	YU,
		ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM					
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG			
WO 2001021599			A1 20010329					WO 1999-KR561 199909									
WO	2001	0215	99	Α	1 :	2001	0329		W	0 19	99-K	R561		1999	0917		
WO		0215: AE,														CR,	CU,
WO		ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,		CN,		•
WO		AE, CZ,	AL, DE,	AM, DK,	AT, DM,	AU, EE,	AZ, ES,	BA, FI,	BB, GB,	BG, GD,	BR, GE,	BY, GH,	CA, GM,	CH,	CN, HU,	ID,	IL,
WO		AE, CZ, IN,	AL, DE, IS,	AM, DK, JP,	AT, DM, KE,	AU, EE, KG,	AZ, ES, KP,	BA, FI, KR,	BB, GB, KZ,	BG, GD, LC,	BR, GE, LK,	BY, GH, LR,	CA, GM, LS,	CH, HR,	CN, HU, LU,	ID, LV,	IL, MD,
WO		AE, CZ, IN, MG,	AL, DE, IS, MK,	AM, DK, JP, MN,	AT, DM, KE, MW,	AU, EE, KG, MX,	AZ, ES, KP, NO,	BA, FI, KR, NZ,	BB, GB, KZ, PL,	BG, GD, LC, PT,	BR, GE, LK, RO,	BY, GH, LR, RU,	CA, GM, LS, SD,	CH, HR, LT,	CN, HU, LU, SG,	ID, LV, SI,	IL, MD, SK,
WO	W:	AE, CZ, IN, MG, SL, BY,	AL, DE, IS, MK, TJ, KG,	AM, DK, JP, MN, TM, KZ,	AT, DM, KE, MW, TR, MD,	AU, EE, KG, MX, TT, RU,	AZ, ES, KP, NO, TZ,	BA, FI, KR, NZ, UA, TM	BB, GB, KZ, PL, UG,	BG, GD, LC, PT, US,	BR, GE, LK, RO, UZ,	BY, GH, LR, RU, VN,	CA, GM, LS, SD, YU,	CH, HR, LT, SE, ZA,	CN, HU, LU, SG, ZW,	ID, LV, SI, AM,	IL, MD, SK, AZ,
WO.	W:	AE, CZ, IN, MG, SL,	AL, DE, IS, MK, TJ, KG,	AM, DK, JP, MN, TM, KZ,	AT, DM, KE, MW, TR, MD,	AU, EE, KG, MX, TT, RU,	AZ, ES, KP, NO, TZ,	BA, FI, KR, NZ, UA, TM	BB, GB, KZ, PL, UG,	BG, GD, LC, PT, US,	BR, GE, LK, RO, UZ,	BY, GH, LR, RU, VN,	CA, GM, LS, SD, YU,	CH, HR, LT, SE, ZA,	CN, HU, LU, SG, ZW,	ID, LV, SI, AM,	IL, MD, SK, AZ,
WO	W:	AE, CZ, IN, MG, SL, BY, GH, DK,	AL, DE, IS, MK, TJ, KG, GM, ES,	AM, DK, JP, MN, TM, KZ, KE,	AT, DM, KE, MW, TR, MD, LS, FR,	AU, EE, KG, MX, TT, RU, MW, GB,	AZ, ES, KP, NO, TZ, TJ, SD, GR,	BA, FI, KR, NZ, UA, TM SL, IE,	BB, GB, KZ, PL, UG, SZ, IT,	BG, GD, LC, PT, US, TZ, LU,	BR, GE, LK, RO, UZ, UG, MC,	BY, GH, LR, RU, VN,	CA, GM, LS, SD, YU, AT, PT,	CH, HR, LT, SE, ZA,	CN, HU, LU, SG, ZW,	ID, LV, SI, AM,	IL, MD, SK, AZ, DE,
	W: RW:	AE, CZ, IN, MG, SL, BY, GH, DK, CG,	AL, DE, IS, MK, TJ, KG, GM, ES,	AM, DK, JP, MN, TM, KZ, KE, FI, CM,	AT, DM, KE, MW, TR, MD, LS, FR,	AU, EE, KG, MX, TT, RU, MW, GB,	AZ, ES, KP, NO, TZ, TJ, SD, GR, GW,	BA, FI, KR, NZ, UA, TM SL, IE, ML,	BB, GB, KZ, PL, UG, SZ, IT, MR,	BG, GD, LC, PT, US, TZ, LU, NE,	BR, GE, LK, RO, UZ, UG, MC, SN,	BY, GH, LR, RU, VN, ZW, NL, TD,	CA, GM, LS, SD, YU, AT, PT,	CH, HR, LT, SE, ZA, BE, SE,	CN, HU, LU, SG, ZW, CH, BF,	ID, LV, SI, AM,	IL, MD, SK, AZ, DE,
	W: RW:	AE, CZ, IN, MG, SL, BY, GH, DK, CG,	AL, DE, IS, MK, TJ, KG, GM, ES,	AM, DK, JP, MN, TM, KZ, KE, FI, CM,	AT, DM, KE, MW, TR, MD, LS, FR, GA,	AU, EE, KG, MX, TT, RU, MW, GB, GN,	AZ, ES, KP, NO, TZ, TJ, SD, GR, GW,	BA, FI, KR, NZ, UA, TM SL, IE, ML,	BB, GB, KZ, PL, UG, SZ, IT, MR,	BG, GD, LC, PT, US, TZ, LU, NE,	BR, GE, LK, RO, UZ, UG, MC, SN,	BY, GH, LR, RU, VN, ZW, NL, TD,	CA, GM, LS, SD, YU, AT, PT, TG	CH, HR, LT, SE, ZA, BE, SE,	CN, HU, LU, SG, ZW, CH, BF,	ID, LV, SI, AM, CY, BJ,	IL, MD, SK, AZ, DE, CF,

IE, SI, LT, LV, FI, RO, MK, CY, AL

PRIORITY APPLN. INFO.: WO 1999-KR561 Α 19990917

> KR 1999-48608 19991104 WO 2000-KR1047 W 20000918

Α

OTHER SOURCE(S): MARPAT 134:262851

GI

The present invention relates to isoxazoline derivs. I (R1 = alkyl, AΒ cycloalkyl, aryl, aralkyl, amino acid sidechain, (CH2)nCOOZ and n = 1,2and Z = H, alkyl, aryl, cycloalkyl; R2 = H, alkyl, cycloalkyl, aryl, aralkyl, amino acid sidechain, (CH2) nOmR7 and n = 0,1,2 and m= 0,1 and R7 = alkyl, cycloalkyl, aryl, aralkyl, (CH2)nCOOR8 and n = 1,2 and R8 = alkyl, cycloalkyl, aralkyl; R3 = alkyl, cycloalkyl, aryl, aralkyl, amino acid sidechain; R4 = N-protected amino acid residue, COR9 and R9 = alkyl, etc., COLCOOR10 and L = linker and R10 = H, alkyl, etc.; R5,R6 = H, alkyl, cycloalkyl, aryl, aralkyl), the pharmaceutically acceptable salts, esters and stereochem. isomeric forms thereof, and the use of the deriv. in inhibiting the activity of caspases. The present invention also relates to a pharmaceutical compn. for preventing inflammation and apoptosis which comprises the isoxazoline deriv., pharmaceutically acceptable salts, esters and stereochem. isomeric forms thereof and the process for prepa. the same. The deriv. according to the present invention can be effectively used in treating diseases due to caspases, such as, for example the disease in which cells are abnormally died, dementia, cerebral stroke, AIDS, diabetes, gastric ulcer, hepatic injure by hepatitis, sepsis, organ transplantation rejection reaction and anti-inflammation.

IT 332020-92-5P 332020-94-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(isoxazoline deriv. caspase inhibitors for pharmaceutical uses)

RN 332020-92-5 HCAPLUS

Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-3-[[[(5S)-4,5-dihydro-3-[(1S)-CN 1-[(1H-indol-2-ylcarbonyl)amino]-2-methylpropyl]-5-(phenylmethyl)-5isoxazolyl]carbonyl]amino]-2-oxobutyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Searched by Thom Larson, STIC, 308-7309

332020-94-7 HCAPLUS RN

Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-3-[[[(5R)-4,5-dihydro-3-[(1S)-CN1-[(1H-indol-2-ylcarbonyl)amino]-2-methylpropyl]-5-(phenylmethyl)-5isoxazolyl]carbonyl]amino]-2-oxobutyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 13 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:227614 HCAPLUS 135:55802

DOCUMENT NUMBER: TITLE:

Pharmacology of caspase inhibitors in rabbit

cardiomyocytes subjected to metabolic

inhibition and recovery

AUTHOR (S):

Li, Hai Ling; Karwatowska-Prokopczuk, Ewa; Mutomba,

Martha; Wu, Joe; Karanewsky, Don; Valentino, Karen;

Engler, Robert L.; Gottlieb, Roberta A.

CORPORATE SOURCE:

Department of Veterans Affairs Medical Center, Research Service and Department of Medicine, San

Diego, CA, 92161, USA

SOURCE:

Antioxidants & Redox Signaling (2001), 3(1), 113-123

CODEN: ARSIF2; ISSN: 1523-0864

PUBLISHER:

Mary Ann Liebert

DOCUMENT TYPE:

Journal LANGUAGE: English

Protection of ischemic myocardium is an important unmet need in reperfusion therapy of acute myocardial infarction. Myocardial ischemia and reperfusion induce

necrosis and apoptosis in cardiomyocytes. Caspase processing and activation are crit. steps in most receptor and nonreceptor pathways of apoptosis. Caspase inhibitors have been shown to reduce ischemia reperfusion injury in cardiac muscle. Information about dose response and time of administration are needed to optimize the design of preclin. studies. The authors used isolated adult rabbit cardiomyocytes subjected to metabolic inhibition (MI) and recovery to examine the role of caspases and caspase inhibitors, the dose response, and the timing of administration. In vitro inhibitory concns. (Ki) were detd. for purified caspases. Cardiomyocytes subjected to MI were treated with peptidomimetic fluoromethyl ketone inhibitors of caspases before or during MI, or at recovery. Caspase inhibitors.were most effective when added before MI and included throughout recovery, but were partially protective if added after MI. The optimal concn. of the inhibitors tested was .apprx.10 .mu.M. Protection was sustained when cells were allowed to recover for 4 or 24 h. These results suggest that caspase activation is an important component of myocyte injury mediated by MI and recovery. Low doses of caspase inhibitors were identified that reduce injury in this model system, and further investigations using in vivo models are warranted.

IT 231950-93-9, IDN 1529

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmacol. of caspase inhibitors in rabbit cardiomyocytes subjected to metabolic inhibition and recovery in relation to treatment of heart ischemia reperfusion injury)

RN 231950-93-9 HCAPLUS

CN Pentanoic acid, 5-fluoro-3-[[(2S)-2-[(1H-indol-2-ylcarbonyl)amino]-1-oxopropyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} H & O & Me \\ \hline H & N & S \\ \hline H & N & CH_2F \\ \hline \\ CO_2H & CO_2H \\ \end{array}$$

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 14 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:152665 HCAPLUS

DOCUMENT NUMBER:

134:207826

TITLE:

Preparation of substituted (aminoiminomethyl or aminomethyl)dihydrobenzofurans and benzopyrans as

factor Xa and factor IIa inhibitors

INVENTOR (S):

Burns, Christopher J.; Dankulich, William P.; McGarry,

Daniel G.; Volz, Francis A.

PATENT ASSIGNEE(S):

Aventis Pharmaceuticals Products Inc., USA

SOURCE:

PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		APPLICATION NO. DATE
WO 2001014358	A2 20010301	WO 2000-IB1562 20000812
WO 2001014358	A3 20010517	
W: AE, AG,	AL, AM, AT, AU,	AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU,	CZ, DE, DK, DM,	DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID,	IL, IN, IS, JP,	KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV,	MA, MD, MG, MK,	MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE,	SG, SI, SK, SL,	TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA,	ZW, AM, AZ, BY,	KG, KZ, MD, RU, TJ, TM
RW: GH, GM,	KE, LS, MW, MZ,	SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
· DE, DK,	ES, FI, FR, GB,	GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG,	CI, CM, GA, GN,	GW, ML, MR, NE, SN, TD, TG
EP 1222182	A2 20020717	EP 2000-968181 20000812
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI,	LT, LV, FI, RO,	MK, CY, AL

PRIORITY APPLN. INFO.:

US 1999-150767P P 19990826 GB 1999-24155 A 19991012 WO 2000-IB1562 W 20000812

OTHER SOURCE(S):

MARPAT 134:207826

GΙ

The title compds. [I; n = 1 or 2; W is H or a ring system substituent; R AΒ is hydrogen, cyano, cycloalkyl, cycloalkenyl, heterocyclyl, fused arylcycloalkyl, fused heteroarylcycloalkyl, etc.; R1 is hydrogen, alkyl, aralkyl, heteroaralkyl, acyl, aroyl, heteroaroyl, alkoxycarbonyl, aryloxycarbonyl or heteroaryloxycarbonyl; R2 and R3 are each hydrogen, or, taken together are :NR4; R4 is hydrogen, R502C, H0, cyano, R5CO, HCO, lower alkyl, nitro, etc.; R5 is alkyl, aryl, heteroaryl, aralkyl, or heteroaralkyl; L1 is alkylene, alkenylene or alkynylene; L2 is absent, alkylene, alkenylene, alkynylene, alkylene-O, alkenylene-O, etc., provided that when L2 is absent, then R is not hydrogen, and Q is attached to R through a carbon atom thereof; Q is NR8', O, CO, CO2, O2C, NR8'(X1), C(X)NR8', NR8C(X1)O, etc.; provided that a nitrogen atom or oxygen atom of O is not directly bonded to a carbon atom of L1 or L2 having a double bond or triple bond, or Q-L2-R is cycloalkyl, cycloalkenyl, heterocyclyl, fused arylcycloalkyl, fused heteroarylcycloalkyl, etc., provided that a nitrogen atom or oxygen atom of Q is not directly bonded to a carbon atom of L1 having a double bond or triple bond; X1 is O or S; R8' is hydrogen, alkyl, aralkyl, heteroaralkyl, acyl, aroyl, heteroaroyl or alkoxycarbonyl; R8 is hydrogen, alkyl, aralkyl, heteroaralkyl, acyl, aroyl or heteroaroyl; and m is 0, 1 or 2], oxides thereof, pharmaceutically acceptable salts, solvates thereof, or prodrugs thereof are prepd. These compds. inhibit the formation of simultaneously directly inhibiting both Factor Xa and Factor IIa (thrombin) and are useful for treating pathol. conditions in a patient that may be ameliorated by administration of such compds. The pathol. conditions include venous vasculature, arterial vasculature, abnormal thrombus formation, acute myocardial infarction, unstable angina, thromboembolism, acute vessel closure assocd. with thrombolytic therapy, percutaneous transluminal coronary angioplasty, transient ischemic attacks, stroke, intermittent claudication or bypass grafting of the coronary or peripheral arteries, vessel luminal narrowing, restenosis post coronary or venous angioplasty, maintenance of vascular access patency in longterm hemodialysis patients, pathol. thrombus formation occurring in the veins of the lower extremities following abdominal, knee and hip surgery, a risk of pulmonary thromboembolism, or disseminated systemic intravascular coagulopathy occurring in vascular systems during septic shock, certain viral infections or cancer (no data). Thus, To a cooled (0.degree.) soln. of 5-(pyrid-2-yl)thiophene-2-carboxylic acid and 4-methylmorpholine in CH2Cl2 is added dropwise a soln. of iso-Pr chloroformate in toluene, stirred 30 min, treated with 2-[5-(N-tert-butoxycarbonyl)carbamimidoyl-2,3-dihydrobenzofuran-3yl]ethylamine in DMF, and the reaction mixt. was allowed to warm to room temp. overnight to give 5-pyridin-2-ylthiophene-2-carboxylic acid [2-[5-(N-tert-butoxycarbonyl)carbamimidoyl-2,3-dihydrobenzofuran-3-yl]ethyl]amide which was stirred with H2O and CF3CO2H in CH2Cl2 for 3 h to give 5-(pyridin-2-yl)thiophene-2-carboxylic acid [2-(5-carbamimidoyl-2,3-dihydrobenzofuran-3-yl)ethyl]amide.

IT 328124-89-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of substituted (aminoiminomethyl or aminomethyl)dihydrobenzofurans and -benzopyrans as inhibitors of factor Xa and factor IIa)

RN 328124-89-6 HCAPLUS

CN Carbamic acid, [[2,3-dihydro-3-[2-[[(5-methoxy-1H-indol-2-yl)carbonyl]amino]ethyl]-5-benzofuranyl]iminomethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

IT 328124-08-9P 328124-37-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted (aminoiminomethyl or

aminomethyl)dihydrobenzofurans and -benzopyrans as inhibitors of factor Xa and factor IIa)

RN 328124-08-9 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[2-[5-(aminoiminomethyl)-2,3-dihydro-3-benzofuranyl]ethyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ NH & C-NH-CH_2-CH_2 \\ \hline \\ MeO \end{array}$$

RN 328124-37-4 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[2-[5-(aminoiminomethyl)-2,3-dihydro-3-benzofuranyl]ethyl]-5-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} & \text{O} \\ & \text{N} & \text{C-NH-CH}_2\text{-CH}_2 \\ & \text{Me} & \text{O} \\ \end{array}$$

328124-64-7P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of substituted (aminoiminomethyl or

aminomethyl)dihydrobenzofurans and -benzopyrans as inhibitors of factor Xa and factor IIa)

328124-64-7 HCAPLUS RN

Carbamic acid, [[2,3-dihydro-3-[2-[[(5-methyl-1H-indol-2-CNyl)carbonyl]amino]ethyl]-5-benzofuranyl]iminomethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ NH & C-NH-CH_2-CH_2 \\ \hline \\ Me \end{array}$$

HCAPLUS COPYRIGHT 2002 ACS L31 ANSWER 15 OF 30

ACCESSION NUMBER:

2000:573516 HCAPLUS

DOCUMENT NUMBER:

133:168404

TITLE:

Osmotic system for delivery of solid amorphous

dispersions of drugs

INVENTOR(S):

Appel, Leah Elizabeth; Curatolo, William John; Herbig,

Scott Max; Nightingale, James Alan Schriver; Thombre,

Avinash Govind

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO. DATE										
		 -												
	EP 1027888	A2	20000816	EP 2000-300572 20000126										
	EP 1027888	A3	20010228											
	R: AT. E	BE, CH. DE	DK. ES.	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,										
	-	SI, LT, LV		22, 22, 22, 22, 22, 32, 32, 32,										
	JP 2000229846	5 A2	20000822	JP 2000-33132 20000210										
				BR 2000-358 20000210										
PRIO	RITY APPLN. IN	VFO.:		US 1999-119406P P 19990210										
AB				for low soly. drugs comprise an amorphous										
AU														
				ated with a non-dissolving and non-eroding										
				x of water to the core so as to cause										
	extrusion of a portion of the core, as well as a method of treating a													
	disease or disorder comprising administering such dosage form to a person													
				rom [R-(R*,S*)]-5-chloro-N-[2-hydroxy-3-										
				enylmethyl)propyl]propyl]-1H-indole-2-										
	carboxamide													
	inhibitor) ar	nd hydroxyj	propyl Me	cellulose acetate succinate.										
ΙT	9035-74-9, G	lycogen pho	osphorylas	se										

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; osmotic system for delivery of solid amorphous dispersions of drugs)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 288154-34-7 288154-35-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(osmotic system for delivery of solid amorphous dispersions of drugs)

RN 288154-34-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-

(methoxymethylamino) -3-oxo-1-(phenylmethyl)propyl]-N-propyl- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

RN 288154-35-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:260225 HCAPLUS

DOCUMENT NUMBER:

132:294010

TITLE:

Preparation of diaminopropionic acid derivatives as intracellular adhesion molecule-1 (ICAM-1) binding

inhibitors

INVENTOR(S):

Fotouhi, Nader; Gillespie, Paul; Guthrie, Robert

William; Pietranico-Cole, Sherrie Lynn; Yun, Weiya

PATENT ASSIGNEE(S):

F. Hoffmann-La Roche A.-G., Switz. PCT Int. Appl., 259 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

1

APPLICATION NO. DATE

```
-----
     WO 2000021920
                      Α1
                           20000420
                                           WO 1999-EP7620
                                                           19991012
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
            MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
             TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6331640
                      B1
                            20011218
                                           US 1999-407534
                                                            19990929
                            20010703
                                           BR 1999-14602
                                                            19991012
     BR 9914602
                       Α
                            20010808
                                           EP 1999-953772
                                                            19991012
     EP 1121342
                       A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                            20020827
                                           JP 2000-575829
                                                            19991012
     JP 2002527416
                       T2
     US 2002052512
                       Α1
                            20020502
                                           US 2001-879700
                                                            20010612
                                        US 1998-104120P P 19981013
PRIORITY APPLN. INFO.:
                                        US 1999-407534
                                                         A3 19990929
                                        WO 1999-EP7620
                                                         W 19991012
OTHER SOURCE(S):
                         MARPAT 132:294010
```

GΙ

CONHCH CH₂-NH-X-(Y)_m-Z
$$CO_2H$$
 CO_2H

Diaminopropionic acid derivs. I [R1 = substituted 1-naphthyl, 4-indolyl, AΒ 4-benzimidazolyl, 4-benzodiazolyl, 4-benzotriazolyl, or phenyl; R2 = CHR3NHCO (R3 = H, carboxy, alkyl), CH2CH2CO, 1,2-cyclopropanediylcarbonyl, OCH2CO, CH:CHCHR3, CH2CH2CH(OH), CONHCHR3, or CH2NH-5,1-tetrazolediyl; U, V, W = H, halo, alkyl provided that U and V are not both hydrogen; X = CO, phenylalkylene, sulfonyl; Y = alkylene which may be substituted by amino or cycloalkyl, alkenylene, alkylenethio; Z = H, alkylthio, CO2H, CONH2, 1-adamantyl, diphenylmethyl, 3-[[(5-chloro-2-pyridinyl)amino]carbonyl]-2pyrazinyl, hydroxy, phenylmethoxy, 2-chloro-4-[[[(3hydroxyphenyl) methyl] amino] carbonyl] phenyl, [(2,6-dichlorophenyl) methoxy], Ph, (un) substituted cycloalkyl or aryl or fused ring system which may contain 0-3 heteroatoms; m, n = 0, 1] or their pharmaceutically acceptable salts or esters were prepd. and are useful for treating rheumatoid arthritis, psoriasis, multiple sclerosis, Crohn's disease, ulcerative colitis, atherosclerosis, restenosis, pancreatitis, transplant rejection, delayed graft function and diseases of ischemia reperfusion injury, including acute myocardial infarction and stroke. Thus, N-[2-chloro-4-[[[(3hydroxyphenyl) methyl] amino] carbonyl] benzoyl] -3-(3-methoxybenzoylamino) -Lalanine was prepd. by the solid-phase method and showed IC50 = 1.2 nM in the LFA-1 (lymphocyte function-assocd. antigen-1)/ICAM-1 protein-protein assay.

Ι

IT 264275-03-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of diaminopropionic acid derivs. as intracellular adhesion mol.-1 (ICAM-1) binding inhibitors)

RN 264275-03-8 HCAPLUS

CN L-Alanine, N-[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]-3-[[(2,3-dihydro-1H-indol-2-yl)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:98049 HCAPLUS

DOCUMENT NUMBER:

132:148495

TITLE:

Preparation of inhibitors of human glycogen phosphorylase and their

therapeutical applications

INVENTOR(S):

Rath, Virginia Leigh; Hoover, Dennis Jay; Ammirati,

Mark

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
	-			
EP 978279	A1	20000209	EP 1999-306047 19990729	
R: AT, BE,	CH, DE	, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC	, PT,
IE, SI,	LT, LV	, FI, RO		
US 2002031816	A1	20020314	US 1999-369214 19990805	
JP 2000083662	A2	20000328	JP 1999-225128 19990809	
BR 9903571	Α	20010306	BR 1999-3571 19990809	
PRIORITY APPLN. INFO	. :		US 1998-95790P P 19980807	
OTHER SOURCE(S):	MAI	RPAT 132:1	48495	
AB The present inv	ention :	is directe	d to a novel binding site for a	
glycogen phosph	orylase	inhibitor	found within	
			The novel hinding	

glycogen phosphorylase inhibitor found within
a glycogen phosphorylase enzyme. The novel binding
site allows the design of novel glycogen phosphorylase
inhibitors. A method of treatment of hyperglycemia,
hyperinsulinemia, hyperlipidemia, insulin resistance or tissue ischemia
using the glycogen phosphorylase inhibitor

is disclosed.

IT 257624-03-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of inhibitors of human glycogen phosphorylase and their therapeutical applications)

RN 257624-03-6 HCAPLUS

CN 3-Azetidinecarboxylic acid, 1-[(2S)-2-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1-oxo-3-phenylpropyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 257624-04-7P 257624-05-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of inhibitors of human glycogen phosphorylase and their therapeutical applications)

RN 257624-04-7 HCAPLUS

CN 3-Azetidinecarboxylic acid, 1-[(2S)-2-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1-oxo-3-phenylpropyl]-, monosodium salt (9CI) (CFINDEX NAME)

Absolute stereochemistry.

Na

RN 257624-05-8 HCAPLUS

CN 3-Azetidinecarboxylic acid, 1-[(2S)-2-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1-oxo-3-phenylpropyl]- (9CI) (CA INDEX NAME)

```
C1 Ph CO2H
```

IT 9035-74-9, Glycogen phosphorylase

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

(Properties); BIOL (Biological study); PROC (Process)

(prepn. of inhibitors of human glycogen phosphorylase and

their therapeutical applications)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 9035-74-9D, Phosphorylase, inhibitor complexes

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(prepn. of **inhibitors** of human glycogen phosphorylase and their therapeutical applications)

RN 9035-74-9 HCAPLUS

CN Phosphorylase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:15754 HCAPLUS

DOCUMENT NUMBER:

132:288599

TITLE:

Pharmacological interference with hepatic glucose

production

AUTHOR (S):

Burger, H.-J.; Schubert, G.; Hemmerle, H.; Kramer, W.;

Herling, A. W.

CORPORATE SOURCE:

Hoechst Marion Roussel Deutschland GmbH, Frankfurt am

Main, 65926, Germany

SOURCE:

Annals of the New York Academy of Sciences (1999),

892 (Metabolic Syndrome X), 312-314

CODEN: ANYAA9; ISSN: 0077-8923

PUBLISHER:

New York Academy of Sciences

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The present study was designed to characterize different pharmacol. approaches to interfere with hepatic glucose prodn. It can be concluded that the best way to reduce hepatic glucose prodn. is the inhibition of hepatic glucose-6- phosphatase activity. Pharmacol. approaches to reduce hepatic glucose prodn. are rational objectives for type 2 diabetes therapy.

IT 186430-23-9, CP 320626

RL: BSU (Biological study, unclassified); BIOL (Biological study) (pharmacol. interference with hepatic glucose prodn.)

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 6

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:613914 HCAPLUS

DOCUMENT NUMBER: 131:257875

Preparation of heterocyclyl phosphotyrosine TITLE:

derivatives as SH2-mediated signal transduction

ADDITION NO

חאידים

inhibitors

INVENTOR(S): Buchanan, John; Bohacek, Regine; Vu, Chi B.; Luke,

George P.

PATENT ASSIGNEE(S): Ariad Pharmaceuticals, Inc., USA

שתאות הואדע

SOURCE: PCT Int. Appl., 194 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATENT NO

PA	PATENT NO. KIND DATE						4	4 P. P. P.	I CA	110	N NC	<i>)</i> .	DATE					
MO	99475	29	A1 1			19990923				WO 1999-US5970						19990318		
		•	•	•	•	RU, DE,		ES,	FI	, FR	., G	В,	GR,	IE,	IT,	LU,	MC,	NL,
CN	23194	PT,	SE	Αž	Λ.	1000	0023			ר מי	۵۵۵	- 23	10/0	2.2	1999	0210		
	10642			A.	_									_	1999			
	R:	AT, IE,	•	CH,	DE,	DK,	ES,	FR,	GB	. GR	, I	Т,	LI,	LU,	NL,	SE,	MC,	PT,
JP	20025	•		T	2	2002	0305		,	JP 2	000	-53	6724	1	1999	0318		
PRIORIT	Y APPI	. N.	NFO.	. :											1998 1998			
	i													_	1999			
OTHER S	OURCE ((S):			MAR	PAT	131:	25787	75									

GI

$$H_2N$$
 S
 I
 CO_2Bn
 I
 CO_2H
 N
 H_2O_3PO
 N
 H
 S
 I
 I

Heterocyclic phosphotyrosine derivs. were prepd. for inhibiting AB intracellular signal transduction, esp. intracellular signal transduction mediated by a PDGF receptor protein, EGF receptor protein, HER2/Neu receptor protein, fibroblast growth factor receptor protein, focal adhesion kinase protein, p130 protein, or p68 protein. For example, BOC-Tyr(PO3Bn2)-OH (BOC = tert-butoxycarbonyl; Bn = benzyl) and the thiazolylamine salt (I).cntdot.TFA (four step prepn. given) were coupled, the phosphate deprotected, the amine acylated, and the carboxylic acid deprotected to form the title compd. (II). In an assay for binding affinities to Src SH2, thirteen compds. of the invention were detd. to have IC50 values of < 50.mu.M. In an assay for binding affinities to Zap-70 SH2, fourteen compds. of the invention exhibited IC50 values of < 50.mu.M. This invention also relates to pharmaceutical compns. contg. the compds. and prophylactic and therapeutic methods involving pharmaceutical and veterinary administration of the compds. for proliferative disease, cancer, restenosis, osteoporosis, inflammation, allergies, cardiovascular disease, or immunosuppression.

IT 244210-62-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; prepn. of heterocyclyl phosphotyrosine derivs. as SH2-mediated signal transduction inhibitors)

RN 244210-62-6 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S)-1-[3-[(3,4-dichlorophenyl)methyl]-1,2,4-oxadiazol-5-yl]ethyl]-5-(phosphonooxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ H_2O_3PO \end{array}$$

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

22

ACCESSION NUMBER:

REFERENCE COUNT:

L31 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2002 ACS 1999:354425 HCAPLUS

DOCUMENT NUMBER:

131:9635

TITLE:

Combination of an aldose reductase inhibitor

and a glycogen phosphorylase

inhibitor

INVENTOR(S):

Mylari, Banavara Lakshman; Hoover, Dennis Jay; Hulin,

THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

Bernard; Treadway, Judith Lee

PATENT ASSIGNEE(S): SOURCE:

Pfizer Products Inc., USA PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA	CENT	NO.		KI	ND	DATE			Α	PPLI	CATI	ON N	ο.	DATE				
									-										
	WO	9926	659		A:	1	1999	0603		W	0 19	98-I	B175	2	1998	1102			
		W:	ΑL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	ΚE,	
			KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
			MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
			TT,	UA,	UG,	US,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	
			CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
	CA	2310	069		A	A.	1999	0603		С	A 19	98-2	3100	69	1998	1102			
	ΑU	9895	558		A	1	1999	0615		Α	U 19	98-9	5558		1998	1102			
	AU	7333	04		B :	2	2001	0510											
	EP	1032	424		A:	1	2000	0906		E	P 19	98-9	4919	3	1998	1102			
	EP	1032	424		B	1	2001	0912											
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FI
	BR	9814	698		Α		2000	1003		В	R 19	98-1	4698		1998	1102			
	AT	2054	03		E		2001	0915		Α	T 19	98-9	4919	3	1998	1102			
	ES	2161	548		T	3	2001	1201		E	S 19	98-9	4919	3	1998	1102			
	JP	2002	5044	78	T	2	2002	0212		J	P 20	00-5	2186	0	1998	1102			
	ZA	9810	636		Α		2000	0522		Z	A 19	98-1	0636		1998	1120			
	NO	2000	0021	64	A		2000	0719		N	0 20	00-2	164		2000	0427			
PRIO	RIT	Y APP	LN.	INFO	. :					US 1	997-	6636	5 P	P	1997	1121			
										WO 1	998-	IB17	52	W	1998	1102			
				-			• • •		-								_		

AB Pharmaceutical compns., kits and methods comprising combination of aldose reductase inhibitors (0.1-20 mg/kg) and glycogen phosphorylase inhibitors (0.1-15 mg/kg), useful for treatment of insulin resistant conditions such as diabetes,

hyperglycemia, hypercholesterolemia, hypertension, hyperinsulinemia, hyperlipidemia, atherosclerosis, and tissue ischemia, etc., are described. E.g., a tablet formulation contained an active ingredient (an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, or a combination of the two) 0.25-100, starch 45, microcryst. cellulose 35, PVP (as 10% soln. in water) 4, Na CM-cellulose 4.5, Mg stearate 0.5, and talc 1 mg/tablet, resp. 186392-40-5 186392-43-8 186392-49-4 IT 186392-53-0 186392-64-3 186429-64-1 186429-78-7 186430-11-5 186430-23-9 186430-41-1 186430-52-4 186431-27-6 208830-24-4 208830-25-5 225929-30-6 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant conditions in humans) RN186392-40-5 HCAPLUS 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-CNoxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-43-8 HCAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-49-4 HCAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(2-hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

RN 186392-53-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(3S)-3-hydroxy-1-pyrrolidinyl]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-64-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-64-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxoethyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 186429-78-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-11-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(1,1-dioxido-3-thiazolidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 186430-41-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-piperidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-52-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(1-oxido-3-thiazolidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-27-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-azetidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

RN 208830-24-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(3,4-dihydroxy-1-pyrrolidinyl)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 208830-25-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3,4-dihydroxy-1-pyrrolidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225929-30-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[3-(hydroxyimino)-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

9035-74-9, Glycogen phosphorylase IT

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

(compns. for inhibitors of aldose reductase and glycogen phosphorylase for prevention and treatment of insulin resistant

conditions in humans)

9035-74-9 HCAPLUS RN

Phosphorylase (9CI) (CA INDEX NAME) CN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:450920 HCAPLUS

DOCUMENT NUMBER: 129:189205

TITLE: Indole-2-carboxamide inhibitors of human

liver glycogen phosphorylase

AUTHOR (S): Hoover, Dennis J.; Lefkowitz-Snow, Sheri;

Burgess-Henry, Jana L.; Martin, William H.; Armento,

Sandra J.; Stock, Ingrid A.; McPherson, R. Kirk;

Genereux, Paul E.; Gibbs, E. Michael; Treadway, Judith

CORPORATE SOURCE: Department of Cardiovascular and Metabolic Diseases

Medicinal Chemistry, Central Research Division, Pfizer

Inc., Groton, CT, 06340, USA

SOURCE: Journal of Medicinal Chemistry (1998), 41(16),

2934-2938

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal

English LANGUAGE:

AB Indole-2-carboxamide derivs. (I; X = Cl, F, Br, H, OMe; R = Ph, cyclohexyl, H, F; Y = CONMe2, CONHMe, CO2Me, CO2H, CH2OH, CONH2, etc.) were prepd. I are potent inhibitors of human liver

glycogen phosphorylase which are active in cells, and produce hypoglycemic activity on oral administration in a rodent model of type 2 diabetes. I [CP-320626; X = Cl, R = F, Y =CO(1-piperidin-4-ol)] produced oral activity at 10 mg/kg. IT 9035-74-9, Glycogen phosphorylase RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process) (human liver; indole-2-carboxamide inhibitors of human liver glycogen phosphorylase) RN9035-74-9 HCAPLUS Phosphorylase (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** 186392-10-9P 186392-11-0P 186392-12-1P 186392-13-2P 186392-22-3P 186392-32-5P 186392-33-6P 186392-34-7P 186392-38-1P 186392-40-5P 186392-56-3P 186429-59-4P 186429-60-7P 186430-05-7P 186430-23-9P 186430-32-0P 186430-34-2P 186430-36-4P 186430-37-5P 186430-39-7P 186430-44-4P 186432-25-7P 186432-26-8P 211677-10-0P 211677-11-1P 211677-12-2P 211677-13-3P 211677-14-4P 211677-15-5P 211677-16-6P 211677-17-7P 211677-18-8P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (indole-2-carboxamide inhibitors of human liver glycogen phosphorylase) RN 186392-10-9 HCAPLUS 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methylamino)-3-CN oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-11-0 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-fluoro-1H-indol-2-yl)carbonyl]amino].alpha.-hydroxy-, methyl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

RN 186392-12-1 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-bromo-1H-indol-2-yl)carbonyl]amino].alpha.-hydroxy-, methyl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-13-2 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]-5-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-22-3 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-chloro-1H-indol-2-yl)carbonyl]amino].alpha.-hydroxy-, methyl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-32-5 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-.alpha.-hydroxy-, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

RN 186392-33-6 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-fluoro-1H-indol-2-yl)carbonyl]amino]-.alpha.-hydroxy-, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-34-7 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-bromo-1H-indol-2-yl)carbonyl]amino]-.alpha.-hydroxy-, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-38-1 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S,2R)-3-amino-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]-5-chloro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-40-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-56-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-bromo-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-59-4 HCAPLUS

CN L-Phenylalanine, N-[(5-chloro-1H-indol-2-yl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-60-7 HCAPLUS

CN L-Phenylalanine, N-[(5-chloro-1H-indol-2-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 186430-05-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(4-hydroxy-1-piperidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-32-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1R)-2-(methylamino)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

RN 186430-34-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-bromo-N-[(1S)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-36-4 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)ethyl]-5-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-37-5 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)ethyl]-5-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-39-7 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-44-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(methylamino)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186432-25-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186432-26-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1R)-2-(dimethylamino)-2-oxo-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 211677-10-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1R,2S)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-11-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1R,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-12-2 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2S)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-13-3 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-14-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2,3-dihydroxy-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-15-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-1-(cyclohexylmethyl)-3-(dimethylamino)-2-hydroxy-3-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 211677-16-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-(hydroxymethyl)-2-phenylethyl]- (9CI) (CA INDEX NAME)

RN 211677-17-7 HCAPLUS

CN Benzenebutanoic acid, .alpha.-hydroxy-.beta.-[(1H-indol-2ylcarbonyl)amino]-, methyl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

RN 211677-18-8 HCAPLUS

CN Benzenebutanoic acid, .alpha.-hydroxy-.beta.-[(1H-indol-2-ylcarbonyl)amino]-, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1998:388320 HCAPLUS

DOCUMENT NUMBER:

129:72196

TITLE:

Use of glycogen phosphorylase

inhibitor for reducing non-cardiac tissue

damage resulting from ischemia

INVENTOR(S):

Hoover, Dennis J.; Martin, William Holt; Tracey, Wayne

Ross; Treadway, Judith Lee

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.		KI	ND	DATE			I	APP	LIC	TATI	ON	NO.	DATE			
	-								_	· – –								
EP	8464	64		A.	2	1998	0610		E	EΡ	199	7-3	097	27	1997	1203		
EP	8464	64		A:	3	1999	0217											
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	G	R,	IT,	LI	, LU	, NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO											
US	5952	322		Ā		1999	0914		τ	JS	199	7-9	783	84	1997	1125		
CA	2223	317		A	A	1998	0605		C	CA	199	7-2	223	317	1997	1203		
JP	1019	4990		A:	2	1998	0728		ت	JΡ	199	7-3	325	23	1997	1203		
JP	3277	147		B	2	2002	0422											
AU	9746	869		A:	1	1998	0611		I	U	199	7-4	686	9	1997	1204		
AU	7175	47		B	2	2000	0330											
ZA	9710	907		Α		1999	0604		2	ZA	199	7-1	090	7	1997	1204		
PRIORIT	Y APF	LN.	INFO	. :				U	JS 1	199	6-3	158	4P	P	1996	1205		
OTHER S	OURCE	:(S):			MAI	RPAT	129:	72196	;									
GI																		

$$R_{10}$$

$$R_{10}$$

$$R_{10}$$

$$R_{11}$$

$$R_{2}$$

$$R_{11}$$

$$R_{2}$$

$$R_{11}$$

$$R_{2}$$

$$R_{11}$$

$$R_{2}$$

$$R_{11}$$

The use of a glycogen phosphorylase inhibitor AB for the manuf. of a medicament for reducing non-cardiac tissue damage resulting from ischemia or hypoxia. The tissue is brain, liver, kidney, lung, gut, skeletal muscle, spleen, pancreas, nerve, spinal code, retina tissue, the vasculature or intestinal tissue. Said glycogen phosphorylase inhibitor is represented by a compd. of formula [I; A = C(X): (wherein X = H, C1-4 alkyl, halo) when the dotted line is a bond; A = CH2 or CH(C1-4 alkyl) when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6-, or 7-NO2, cyano, C1-4 alkyl or alkoxy, CH2F, CF2H, CF3; R2 = H; R3 = H, C1-5 alkyl; R4 = H, Me, Et, n-Pr, C1-3 hydroxyalkyl, C1-3 alkoxy-C1-3 alkyl, phenyl-C1-4 alkyl, thien-2- or -3-yl-C1-4 alkyl, furan-2- or -3-yl-C1-4 alkyl, etc.; R5 = H, OH, F, C1-5 alkyl or alkoxy, C1-6 alkanoyl, amino-C1-4 alkoxy, mono-N- or di-N, N-C1-4 alkyl amino-C1-4 alkoxy, carboxy-C1-4 alkoxy, etc.; R7 = H, F, C1-5 alkyl; or R5 and R7 are taken together to form oxo; R6 = CO2H, C1-8 alkoxycarbonyl, (un) substituted CONH2, COR12; wherein R12 = piperazin-1-yl, 4-(C1-4 alkyl)piperazin-1-yl, 4-formylpiperazin-1-yl, morpholino, thiomorpholino, 1-oxothiomorpholino, 1,1-dioxothiomorpholino, thizolidin-3-yl, etc.], e.g. indolecarboxamide (II) which inhibited human liver glycogen phosphorylase a (HLGPa) and human muscle glycogen phosphorylase a (HMGPa) with IC50 of 45 and 85 nM, resp.

186392-40-5 186392-43-8 186392-46-1 IT 186392-49-4 186392-53-0 186392-64-3 186429-66-3 186430-04-6 186430-23-9 186430-40-0 186431-27-6 186431-28-7 208830-24-4 208830-25-5 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of glycogen phosphorylase inhibitor for reducing non-cardiac tissue damage resulting from ischemia or hypoxia) RN186392-40-5 HCAPLUS 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-CN oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-43-8 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-46-1 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-(3-hydroxy-1-azetidinyl)-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-49-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(2-

hydroxyethyl)methylamino]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-53-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-2-hydroxy-3-[(3S)-3-hydroxy-1-pyrrolidinyl]-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-64-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186429-66-3 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-(3-hydroxy-1-pyrrolidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O & CH_2-Ph \\ N & || & C-NH-CH-C-N \\ O & OH \\ \end{array}$$

RN 186430-04-6 HCAPLUS CN 1H-Indole-2-carboxamide, 5-chloro-N-[2-oxo-2-(3-thiazolidinyl)ethyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & C - NH - CH_2 - C - N \end{array}$$

RN 186430-23-9 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-1-[(4-fluorophenyl)methyl]-2-(4-hydroxy-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186430-40-0 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-2-oxo-1-(phenylmethyl)ethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-27-6 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3-hydroxy-1-azetidinyl)-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186431-28-7 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-[3-(hydroxyimino)-1-azetidinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 208830-24-4 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(3,4-dihydroxy-1-pyrrolidinyl)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 208830-25-5 HCAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[(1S)-2-(3,4-dihydroxy-1-pyrrolidinyl)-2-oxo-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

```
ОН
```

9035-74-9, Glycogen phosphorylase IT

> RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)

(use of glycogen phosphorylase inhibitor for reducing

non-cardiac tissue damage resulting from ischemia or hypoxia)

RN9035-74-9 HCAPLUS

(CA INDEX NAME) Phosphorylase (9CI) CN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:197402 HCAPLUS

DOCUMENT NUMBER:

128:275085

Combination therapy for reducing the risks associated TITLE:

with cardiovascular disease

Gould, Robert J.; Nichtberger, Steven A.; Rhymer, INVENTOR(S):

Patricia A.; Olofsson, Lars

Merck & Co., Inc., USA; Gould, Robert J.; Nichtberger, PATENT ASSIGNEE(S):

Steven A.; Rhymer, Patricia A.; Olofsson, Lars

PCT Int. Appl., 40 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	FENT										CATI			DATE				
	9811													1997	0915			
	W:	AL,	AM,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,	
						KG,												
						RO,												
						AZ,								•	•	•	·	
	RW:					SD,								DK.	ES.	FI,	FR.	
						LU,												
						SN,			,	,	,	,	,	,	,		•	
ΙΙΔ	9743		•			•	•		A	U 19	97-4	3508		1997	0915			
	7233																	
	9461								E	P 19	97-9	4164	4	1997	0915			
21						DK,											IE.	FI
JT.	2001															,	,	
	6251																	
	6235					2001								1999				
	2001					2001												
	6403					2002				5 20	υ	0151	_	2001	0 0			
PRIORIT						2002			ו פוו	996-	2658	1 D	D	1996	0918			
FKIOKII	I WEE	T-174 •	TNEO	• •										1996				
														1997				
									MO T	<i></i>	OSTO	300	VV.	1331	0913			

US 1999-147858 A3 19990527

The instant invention involves a combination therapy and pharmaceutical AB compns. comprised of a therapeutically effective amt. of a cholesterol reducing agent such as an HMG-CoA reductase inhibitor in combination with a platelet aggregation inhibitor which is useful for inhibiting platelet aggregation, for inhibiting the formation of thrombotic occlusions, and for treating, preventing and reducing the risk of occurrence of cardiovascular and cerebrovascular events and related vaso-occlusive disorders. Tablets were prepd. contg. simvastatin and a glycoprotein IIb/IIIa receptor antagonist.

TT 190261-01-9

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy for reducing the risks assocd. with cardiovascular disease)

190261-01-9 HCAPLUS RN

L-Alanine, N-(phenylsulfonyl)-3-[[[5-(4-piperidinylmethoxy)-1H-indol-2-CN yl]carbonyl]amino] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 2002 ACS

1998:121995 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

SOURCE:

128:252809

TITLE: Discovery of a human liver glycogen phosphorylase inhibitor that lowers

blood glucose in vivo

AUTHOR (S): Martin, William H.; Hoover, Dennis J.; Armento, Sandra

> J.; Stock, Ingrid A.; Mcpherson, R. Kirk; Danley, Dennis E.; Stevenson, Ralph W.; Barrett, Eugene J.;

Treadway, Judith L.

CORPORATE SOURCE: Central Research Division, Department of Exploratory

> Medicinal Biology, Pfizer, Inc, Groton, CT, 06340, USA Proceedings of the National Academy of Sciences of the

United States of America (1998), 95(4), 1776-1781

CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

An inhibitor of human liver glycogen phosphorylase a (HLGPa) has been identified and characterized in vitro and in vivo. This substance, [R-(R*,S*)]-5-chloro-N-[3-(dimethylamino) -2-hydroxy-3-oxo-1-(phenylmethyl)propyl] -1H-indole-2carboxamide (CP-91149), inhibited HLGPa with an IC50 of 0.13 .mu.M in the presence of 7.5 mM glucose. CP-91149 resembles caffeine, a known allosteric phosphorylase inhibitor, in that it is 5- to 10-fold less potent in the absence of glucose. Further anal., however, suggests that CP-91149 and caffeine are kinetically distinct. Functionally, CP-91149

inhibited glucagon-stimulated glycogenolysis in isolated rat hepatocytes (P < 0.05 at 10-100 .mu.M) and in primary human hepatocytes (2.1 .mu.M IC50). In vivo, oral administration of CP-91149 to **diabetic** ob/ob mice at 25-50 mg/kg resulted in rapid (3 h) glucose lowering by 100-120 mg/dL (P < 0.001) without producing hypoglycemia. Further, CP-91149 treatment did not lower glucose levels in normoglycemic, nondiabetic mice. In ob/ob mice pretreated with 14C-glucose to label liver glycogen, CP-91149 administration reduced 14C-glycogen breakdown, confirming that glucose lowering resulted from inhibition of glycogenolysis in vivo. These findings support the use of CP-91149 in investigating glycogenolytic vs. gluconeogenic flux in hepatic glucose prodn., and they demonstrate that glycogenolysis inhibitors may be useful in the treatment of type 2 **diabetes**.

IT 186392-40-5P, CP 91149

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(blood glucose lowering by CP-91149, oral inhibitor of human liver glycogen phosphorylase, in model of type II diabetes)

RN 186392-40-5 HCAPLUS

1H-Indole-2-carboxamide, 5-chloro-N-[(1S,2R)-3-(dimethylamino)-2-hydroxy-3-oxo-1-(phenylmethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 186392-22-3P 186392-32-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(blood glucose lowering by CP-91149, oral inhibitor of human liver glycogen phosphorylase, in model of type II diabetes)

RN 186392-22-3 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-chloro-1H-indol-2-yl)carbonyl]amino].alpha.-hydroxy-, methyl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186392-32-5 HCAPLUS

CN Benzenebutanoic acid, .beta.-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-.alpha.-hydroxy-, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:115888 HCAPLUS

DOCUMENT NUMBER: 128:230390

TITLE: Preparation of piperazine derivatives as NO producing

inhibitors

INVENTOR(S): Ito, Yoshikuni; Yatabe, Isao; Inoue, Takayuki;

Hamashima, Hitoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE --**----**----_____ ______ 19980217 JP 1997-131796 19970522 JP 10045751 A2 AU 1996-83 19960527 PRIORITY APPLN. INFO.:

Ι

OTHER SOURCE(S): MARPAT 128:230390

GΙ

AB The title compds. [I; R1 = indolyl, benzofuranyl; R2, R3 = (un)substituted alkyl, aryl, etc.; X = CH2, CO; n = 0, 1] are prepd. I, possessing NO producing inhibitory activity, are useful for prevention and treatment of brain infarction, Alzheimer disease, heart failure, diabetes and related diseases. Thus, (S)-I (R1 = 2-indolyl, R2 = CH2C6H5, R3 = Me, X = CH2, n = 1) is prepd. and showed 70.9% inhibitory activity at 10-5 M for mouse RAW264.7 cell.

IT 204328-01-8P 204328-04-1P 204328-07-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

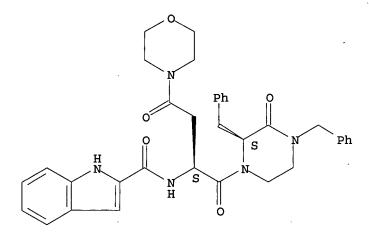
Absolute stereochemistry.

RN 204328-04-1 HCAPLUS
CN 1H-Indole-2-carboxamide, N-[1-[[4-methyl-3-oxo-2-(phenylmethyl)-1-piperazinyl]carbonyl]-3-(4-morpholinyl)-3-oxopropyl]-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204328-07-4 HCAPLUS
CN 1H-Indole-2-carboxamide, N-[3-(4-morpholinyl)-3-oxo-1-[[3-oxo-2,4-bis(phenylmethyl)-1-piperazinyl]carbonyl]propyl]-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L31 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1996:275069 HCAPLUS

DOCUMENT NUMBER:

125:10799

TITLE:

Thiazolidinedione compounds useful for treating

conditions of insulin-resistance and/or non

insulin-dependent diabetes

INVENTOR(S):

Regnier, Gilbert; Charton, Yves; Duhault, Jacques;

Espinal, Joseph

PATENT ASSIGNEE(S):

ADIR et Compagnie, Fr.

SOURCE:

U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 133,898,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE .
US 5506245	 А	19960409	US 1995-374970	19950119
FR 2696743	A1	19940415	FR 1992-12123	19921012
FR 2696743	B1	19941223		
PRIORITY APPLN. INFO.	:	FR	1992-12123	19921012
		US	1993-133898	19931012
OTHER SOURCE(S) .	MΔ	PDAT 125.10799		

GI

$$Ar-A-X-B$$
 CH_2
 NH
 S
 O
 I

$$\begin{array}{c} \text{C1} & \text{O} \\ \text{C} \\ \text{NH} - \text{CH}_2 - \text{CH}_2 \end{array} \\ \text{OMe} & \text{NH} \\ \end{array}$$

Thiazolidinedione compds. I useful for treating conditions of AΒ insulin-resistance and/or non insulin-dependent diabetes are provided, wherein: Ar represents a polymethylene ring, a mono-, bi- or tricyclic hydrocarbon radical, or a mono-, bi- or tri-cyclic heterocyclic radical contg. 1 or 2 hereto atoms selected from nitrogen, oxygen and sulfur atoms; A represents, e.g., a single bond, a hydrocarbon chain having 2 or 3 carbon atoms and including a double bond, or a chain of the formula (CH2)m , O(CH2)m or S(CH2)m wherein: m is an integer from 1 to 3; X represents an oxygen atom, CONR or SO2NR wherein R represents a hydrogen atom or a straight-chain or branched alkyl radical having from 1 to 5 carbon atoms and optionally including a double bond, or, when A represents a single bond and Ar represents a Ph radical, R may also represent a carbonyl radical bonded to Ar by its free bond such that Ar-A-X together form a phthalimido radical; B represents a satd. hydrocarbon chain having from 1 to 6 carbon atoms which is optionally branched and/or substituted by a hydroxy radical or an oxo radical. Thus, e.g., cyclization of Me $3-\{4-[2-(2-methoxy-5-chlorobenzamido)ethyl]phenyl\]-2-chloropropionate with$ thiourea afforded 5-{4-[2-(2-methoxy-5-chlorobenzamido)ethyl]benzyl}thiazo lidine-2,4-dione II which exhibited the same hypoglycemic effect at .ltoreq.10 mg/kg/day for 4 days as Ciglitazone at 50-100 mg/kg/day for 4 days. The compds. of the invention do not have any influence on the level of circulating glucose but decrease the level of triglycerides and free fatty acids in the plasma and also the level of immuno-reactive insulin. IT

174772-17-9P 174772-25-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(thiazolidinedione compds. useful for treating conditions of insulin-resistance and/or non insulin-dependent diabetes)

RN174772-17-9 HCAPLUS

CN

1H-Indole-2-carboxamide, N-[2-[4-[(2,4-dioxo-5thiazolidinyl)methyl]phenyl]ethyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C - NH - CH_2 - CH_2 \\ \hline \end{array}$$

RN 174772-25-9 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[2-[4-[(2,4-dioxo-5-

thiazolidinyl)methyl]phenyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & C - NH - CH_2 - CH_2 \\ \hline \end{array}$$

L31 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1996:58393 HCAPLUS

DOCUMENT NUMBER:

124:232440

TITLE:

Thazolidinedione compounds useful as antidiabetics Regnier, Gilbert; Charton, Yves; Duhault, Jacques;

Espinal, Joseph

PATENT ASSIGNEE(S):

INVENTOR(S):

Adir et Compagnie, Fr.

SOURCE:

U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 133,898,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
US 5478853	Α	19951226	US 1995-376052	19950120
FR 2696743	A1	19940415	FR 1992-12123	19921012
FR 2696743	B1	19941223		
PRIORITY APPLN. INFO.	:		FR 1992-12123	19921012
			US 1993-133898	19931012

OTHER SOURCE(S):

MARPAT 124:232440

GI

$$Ar-A-X-B$$
 CH_2
 NH
 S

$$Q^{1}=$$
C1
CONHCH₂CH₂
CONHCH₂CH₂
OMe

The title compds. are 5-(4-substituted benzyl)thiazolidine-2,4-diones I AB [Ar = polymethylene ring with optional alkyl substituent(s), (un) substituted aryl or heterocyclyl; A = bond, hydrocarbondiyl with double bond, (CH2)1-3, CMe2(CH2)0-2, (un)substituted CHPh(CH2)0-2, O(CH2)1-3, S(CH2)1-3; X = O, CONR, SO2NR; R = H, alkyl, alkenyl; or ArAX =phthalimido; B = satd. hydrocarbondiyl with optional OH or oxo substituent] and their enantiomers, diastereoisomers, and pharmaceutically tolerable salts. The compds. are useful for treating insulin resistance and/or non-insulin-dependent diabetes, possibly assocd. with hypertension. An exemplary compd. compd. is 5-[4-[2-(2-methoxy-5chlorobenzamido)ethyl]benzyl]thiazolidine-2,4-dione, i.e., I [Ar-A-X-B- = Q1] (II), which was prepd. by cyclization of the corresponding 3-phenyl-2-chloropropionic acid deriv. with thiourea in sulfolane at 120.degree., followed by hydrolysis with aq. HCl at 100.degree.. II, at .ltoreq. 10 mg/kg/day orally in mice, had the same hypoglycemic effect as ciglitazone at 50-100 mg/kg/day. II also had little or no hematol. effect at 250 mg/kg/day in rats, whereas pioglitazone had strong adverse effects at 100 mg/kg/day.

IT 174772-17-9P 174772-25-9P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of thiazolidinediones as antidiabetics)

RN 174772-17-9 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]ethyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C - NH - CH_2 - CH_2 \\ \hline \end{array}$$

RN 174772-25-9 HCAPLUS

CN 1H-Indole-2-carboxamide, N-[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]ethyl]- (9CI) (CA INDEX NAME)

L31 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:410003 HCAPLUS

DOCUMENT NUMBER: 121:10003

TITLE: Preparation of peptides by reaction of olefinic

alcohol and enol ether for treatment of tachypnea and

myocardial reperfusion injury.

INVENTOR(S): Itsumi, Keiji; Kei, Seihaku; Fukami, Jikiki; Hashihon,

Sanashi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 131 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
JP 05208914	A2	19930820	JP 1992-233604	19920901
US 5430022	Α	19950704	US 1993-86094	19930706
US 5656604	Α	19970812	US 1995-422944	19950417
PRIORITY APPLN. INFO.	:		US 1991-753997	19910903
			GB 1990-10740	19900514
			GB 1990-26254	19901203
			GB 1991-4064	19910227
			US 1991-696701	19910507
			US 1992-845056	19920303
			US 1993-86094	19930706

OTHER SOURCE(S): MARPAT 121:10003

GI

Title compds. I [R1 = H, acyl; R2 = alkyl, (un)substituted aralkyl, cycloalkylalkyl, (un)substituted heterocyclylalkyl; R3 = (un)substituted heterocyclylalkyl, (un)substituted aralkyl; R4 = H, (un)substituted alkyl; R5 = carboxy, (un)protected carboxy, (un)protected carboxyalkyl; R6 = H, (un)substituted alkyl; R7 = H, alkyl; A = O, NH, alkylimino, alkylene; with provisos], useful for the treatment of many cardiovascular injury, e.g., hypertension, are prepd. Thus, a mixt. of N-phenylacetyl-Leu-OH and H-D-Trp(Me)-D-Phe-OMe.HCl in DMF was stirred with ice cooling for 4.5 h to give PhCH2CO-Leu-D-Trp(Me)-D-Phe-OMe. In an in vitro study, Q-Leu-D-Trp(Me)-D-Pya-OH.HCl [Q = cyclohexylcarbamoyl, Pya = 2-pyridylalanine] (also prepd.) had an IC50 of 2.3.times.10-9 M against

the binding of 125-I-endothelin-1 with pig aorta receptors.

IT 142377-52-4P 142378-01-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, for treatment of tachypnea and myocardial reperfusion injury)

RN 142377-52-4 HCAPLUS

CN D-Glutamic acid, N-[1-formyl-N-[N-(1H-indol-2-ylcarbonyl)-L-leucyl]-D-tryptophyl]-, 1-(2-oxo-2-phenylethyl) 5-(phenylmethyl) ester (9CI) (CAINDEX NAME)

Absolute stereochemistry.

RN 142378-01-6 HCAPLUS

CN D-Glutamic acid, N-[1-formyl-N-[N-(1H-indol-2-ylcarbonyl)-L-leucyl]-D-tryptophyl]-, 5-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L31 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:409168 HCAPLUS

DOCUMENT NUMBER: 119:9168

TITLE: Preparation of oxiranyl and oxetanyl renin inhibiting

compounds

INVENTOR(S): Rosenberg, Saul H.

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE KIND DATE ---**---**----------WO 1992-US4423 WO 9222313 A1 19921223 19920526 W: AU, CA, JP, KR RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE US 5258362 Α 19931102 US 1992-880250 19920513 AU 9221593 19930112 AU 1992-21593 19920526 PRIORITY APPLN. INFO.: US 1991-713475 19910611 US 1992-880250 19920513 WO 1992-US4423 19920526

OTHER SOURCE(S):

MARPAT 119:9168

GI

The title compds. I and II [R = mimic of Phe-His dipeptide; R4 = lower AB alkyl, cycloalkyl, arylalkyl; R5 = H, lower alkyl, hydroxyalkyl, lower alkenyl, CHO; R6 = OH, NH2; R7 = H, lower alkyl; R8 = H, lower alkyl, hydroxyalkyl, alkoxyalkyl, thioalkoxyalkyl, haloalkyl, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, cycloalkyl, cycloalkylalkyl, lower alkenyl, alkynyl, aryl, arylalkyl, heterocyclic, heterocycloalkyl; R7R8 = (CH2)n, n = 3-6; R9 = lower alkyl] or a pharmaceutically acceptable salt, ester, or prodrug of, were prepd. as renin inhibitors. Thus, Reformatskii reaction of (4S,5R)-3-tertbutoxycarbonyl-4-cyclohexylmethyl-2,2-dimethyloxazolidine-5-carboxaldehyde with benzyl bromoacetate gave hydroxy ester III (Boc = Me3CO2C; R1 = CO2CH2Ph), which was reduced with NaBH4-CaCl2 to diol III (R1 = CH2OH) and selectively tosylated to tosylate III (R1 = CH2O3SC6H4Me-4) (IV). Cyclization of tosylate IV to the corresponding oxetane, followed by acidic deprotection, coupling with Boc-Phe-His(Boc)-OH, and selective deblocking gave oxetanyl peptide V. Compds. I and II are useful in treating hypertension, congestive heart failure, glaucoma, and inhibiting HIV-1 and HIV-2 proteases.

IT 147896-46-6P

RL: BAC (Biological activity or effector, except adverse); SPN

(Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of, as renin inhibitor)

RN 147896-46-6 HCAPLUS

CN L-Altritol, 4,6-anhydro-2-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1-cyclohexyl-1,2,5-trideoxy-5-ethyl- (9CI) (CA INDEX NAME)

L31 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1988:493611 HCAPLUS

DOCUMENT NUMBER:

109:93611

TITLE:

Preparation and testing of

(aminopropoxy) naphthylcarboxamidopentylalanylprolines

and indole analogs as cardiovascular agents

INVENTOR (S):

Allan, Geoffrey; Hardy, George William; Bull, Donald;

Mills, Gail; Lee, Grahame Roy

PATENT ASSIGNEE(S):

Wellcome Foundation Ltd., UK Eur. Pat. Appl., 43 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 234946	A2	19870902	EP 1987-301740	19870227
EP 234946	A3	19880817		
R: AT, BE,	CH, DE	, ES, FR, GB,	GR, IT, LI, LU, NL	, SE
FI 8700872	Α	19870829	FI 1987-872	19870227
DK 8701033	A	19870829	DK 1987-1033	19870227
AU 8769536	A1	19870903	AU 1987-69536	19870227
JP 62252799	A2	19871104	JP 1987-45119	19870227
HU 46045	A2	19880928	HU 1987-816	19870227
ZA 8701454	Α	19881026	ZA 1987-1454	19870227
DD 263052	A5	19881221	DD 1987-300269	19870227
PRIORITY APPLN. INFO	. :		GB 1986-5049	19860228
			GB 1986-20767	19860828

Me2CHNHCH2CH(OH)CH2OXCONH(CH2)4CHZNHCHMeCOY (I; X = naphthyl, indolyl ring system; Y = CO2H, C2-5 alkoxycarbonyl; Z = carboxypyrrolidinyl) were prepd. as antihypertensives. Me 4-hydroxyindole-2-carboxylate (prepn. given) was treated with NaH in DMF and 2S-glycidyl tosylate was added at 0.degree.. The mixt. was stirred 3 h at 50.degree. to give the 4-oxiranylmethoxy compd., which was heated with Me2CHNH2 in DMF/H2O to give Me 4-[2(S)-hydroxy-3-isopropylamino]-1H-indole-2-carboxylate. The latter was N-protected, sapond., coupled with tert-Bu N-[1(S)-tert-butoxycarbonyl-5-aminopentyl]-(S)alanyl-(S)-prolinate (prepn. given) to give N-1S-carboxy-5-[4-(2S-hydroxy-3-isopropylaminopropoxy)-1H-indol-2-ylcarboxamido]pentyl-S-alanyl-S-proline. The latter inhibited ACE in a

test of angiotensin-I-induced pig ileum contractility with an EC50 of 1.4 $\ensuremath{\text{nM}}\xspace$.

IT 115794-86-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of, as cardiovascular agent)

RN 115794-86-0 HCAPLUS

CN L-Proline, N-[(1S)-1-carboxy-5-[[[4-[(2S)-2-hydroxy-3-[(1-methylethyl)amino]propoxy]-1H-indol-2-yl]carbonyl]amino]pentyl]-L-alanyl-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 115794-89-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for cardiovascular agent)

RN 115794-89-3 HCAPLUS

CN L-Proline, 1-[N-[1-[(1,1-dimethylethoxy)carbonyl]-5-[[[4-[3-[[(1,1-dimethylethoxy)carbonyl](1-methylethyl)amino]-2-hydroxypropoxy]-1H-indol-2-yl]carbonyl]amino]pentyl]-L-alanyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B